

**EXHIBIT "A"**  
**SCOPE OF WORK**

REMOVAL OF ASBESTOS  
MATERIALS (ACBM)

**I. GENERAL**

- A. Contractor, if doing business under an assumed name i.e., an Individual, Association, Partnership, Corporation, or otherwise, shall be registered with the State of South Carolina.
- B. Contractor shall assume full responsibility for damage to City property caused by Contractor's employees or equipment as determined by designated City personnel.
- C. Contractor shall be solely responsible for the safety of Contractor's employees and others relative to Contractor's work, work procedures, material, equipment, transportation, signage and related activities and equipment. Contractor shall take all necessary safety precautions and shall comply with all applicable provisions of Federal, State and Municipal safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the work is being performed. The City designee, or his assigned representative, may stop work if safety laws or safe work practices are not being observed.
- D. Contractor shall possess and keep in force all licenses and permits required to perform the services of this Agreement.

**II. RESPONSIBILITIES OF THE CONTRACTOR**

The responsibilities of the Contractor include, but shall not be limited to the following:

- A. Contractor shall provide all resources necessary and shall remove all asbestos and as outlined in Exhibit "B".
- B. Contractor shall perform all work in accordance with the specifications and requirements as contained in Exhibit "C". attached and incorporated by references.

**EXHIBIT "B"**

**PRICE SCHEDULE**

**I. GENERAL**

A. Prices stated include all costs associated with the performance of the services specified, including materials, supervision, labor, transportation, disposal and related costs. No other charges shall be allowed.

B. Prices stated shall be firm if not specifically notes otherwise.

**II. PRICING**

Firm lump sum cost to perform all required asbestos abatement services  
\$ \_\_\_\_\_

**III. INVOICING AND PAYMENT**

City shall make payment to Contractor for all services performed by Contractor pursuant to this Agreement. Contractor shall submit an invoice for services rendered and City shall pay the invoiced fee within thirty (30) days after receipt of the invoice by the City.

Invoices shall be submitted to: City of Hanahan  
Administration  
Accounting Department  
1255 Yeamans Hall Road  
Hanahan, South Carolina 29410

**EXHIBIT "C"**

*COMPREHENSIVE ASBESTOS SURVEYS*

*ASBESTOS ABATEMENT REMOVAL*

**1242 YEAMANS HALL ROAD**

**1240 YEAMANS HALL ROAD**

**5902 HOWARD STREET**

# **COMPREHENSIVE ASBESTOS SURVEY**

**COMMERCIAL BUILDING  
1240 YEAMANS HALL ROAD  
HANAHAN, SC 29410**



*Prepared For:*

**CITY OF HANAHAN  
Attn: Mrs. Katherine Farias  
1255 Yeamans Hall Road  
Hanahan, SC 29410  
(843) 576-5254**

*Performed By:*

**TES**

**Trident Environmental Services, Inc.**

*Consultants in Industrial Hygiene and Safety  
500 Oakbrook Lane, Suite E  
Summerville, SC 29485  
(843) 873-3648*

# COMPREHENSIVE ASBESTOS SURVEY

Commercial Building  
1240 Yeamans Hall Road  
Hanahan, SC 29410

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## EXECUTIVE SUMMARY

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 18, 2018 of the Commercial Building located at 1240 Yeamans Hall Road in Hanahan, South Carolina did reveal the presence of asbestos containing building materials. The following summary exhibits the asbestos containing building materials (ACBM) that were identified in the inspection.

### Asbestos

| Description                           | Type                      |
|---------------------------------------|---------------------------|
| Transite Siding                       | Category II – Non Friable |
| Exterior Caulk                        | Category I – Non Friable  |
| 9” Floor Tile (beige)                 | RACM – Friable            |
| Floor Tile Mastic (black)             | Category I – Non Friable  |
| Vinyl Sheet Flooring (yellow squares) | RACM – Friable            |
| Vinyl Mastic (black)                  | Category I – Non Friable  |
| Drywall/Joint Compound                | RACM – Friable            |

RACM – Regulated Asbestos Containing Material

The identified ACBM includes the item(s) listed above. All removal work of the identified ACBM should be performed by a properly trained and licensed abatement contractor prior to the planned renovation/demolition activities.

## BACKGROUND

Trident Environmental Services, Inc. was contracted by City of Hanahan to perform a comprehensive asbestos survey of the Commercial Building located at 1240 Yeamans Hall Road in Hanahan, South Carolina. The survey was performed in order to satisfy the NESHAP requirements for renovation and/or demolition. The structure is a one bedroom, one bathroom duplex constructed on foundation and consisting of approximately 800 square feet. Interior walls and ceilings are drywall with joint compound applied at the seams and patches. Floor finishes include vinyl floor tiles, vinyl sheet flooring, hardwood and carpet. Roofing material consists of asphalt shingles and felt paper. Exterior construction is wood, with wood trim, soffits, eaves doors/windows and transite siding,

### Asbestos

The inspection was conducted to identify asbestos-containing building materials (ACBM) which may be disturbed during the renovation/demolition activities. The identification of ACBM will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos fibers. Identification of ACBM also complies with Title 40 Code of the Federal Regulations, Part 61, and South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1, along with Title 29 Code of Federal Regulations, Part 1926 enforced by the Occupational Safety and Health Administration (OSHA). The Asbestos Survey describes the investigative procedures utilized, results of the suspect ACBM sampled/analyzed, and recommendations regarding the structures as related to asbestos.

## ASBESTOS SURVEY

### Asbestos Investigative Procedures

Trident Environmental Services, Inc. conducted an inspection for suspect ACBM on September 18, 2018 of the Commercial Building located at 1240 Yeamans Hall Road in Hanahan, South Carolina. It is our understanding that the subject structure will undergo renovation or demolition activities in the near future. The asbestos survey was performed by observing and sampling suspect building materials. Significant destructive testing was not utilized during the inspection. There is a possibility that suspect materials exist in inaccessible areas such as wall cavities and pipe chases. If any additional suspect ACBM are discovered during the course of demolition activities, bulk samples should be extracted to identify the presence, or absence, of asbestos prior to continuation of work activities.

A sampling strategy was developed to provide representative samples for analysis. Samples were then extracted from a variety of suspect ACBM. Bulk samples collected were recorded on a Chain-of-Custody record and submitted to Trident Environmental Service Center, Inc. (TESC) a Polarized Light Microscopy (PLM) laboratory. The laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology (NIST). TESC is accredited by NVLAP for the analysis of bulk asbestos by PLM (NVLAP Lab Code: 200794-0).

The suspect materials were analyzed by trained microscopists utilizing PLM techniques coupled with dispersion staining in accordance with EPA Test Method Title 40 Code of Federal Regulations, Chapter I (1-1-87 edition), Part 763, Subpart F- Appendix A. This method identifies asbestos mineral fibers based on six optical characteristics: morphology, birefringence, refractive index, extinction angle, sign of elongation and dispersion staining colors. The laboratory analysis reports the specific type of asbestos identified (there are six asbestos minerals) and the percentage of asbestos present. The EPA and OSHA defines materials as asbestos containing if an asbestos content of greater than one percent (>1%) is detected in a representative sample.

Non-Friable Organically Bound (NOB) samples were submitted to AmeriSci Richmond Laboratory for analyses by Transmission Electron Microscopy (TEM). SCDHEC requires NOB materials with negative or trace results by PLM to be analyzed by at least one TEM. SCDHEC in accordance with ASTM E 2356-04 defines NOB materials as “materials that are not friable and that consist of fibers and other particulate matter embedded in a solid matrix of asphalt, vinyl or other organic substances.” Examples of NOB materials include but are not limited to flooring materials such as vinyl floor tiles, vinyl sheet flooring, adhesives, mastics, asphalt shingles, roofing materials, glazing, caulks, and cove base.



The EPA classifies ACBM into two categories, friable and non-friable. A friable material creates a greater health hazard due to the fact that it may be “crumbled, pulverized or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations.”

*Friable Asbestos* material means any material containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763 section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

*Category I Non Friable Asbestos-Containing Material (ACM)* means asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy.

*Category II Non Friable ACM* means any material, excluding Category I non friable ACM, containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. (cement siding, transite board shingles, etc.)

*Regulated Asbestos-Containing Material (RACM)* means (a) Friable asbestos material, (b) Category I non friable ACM that has become friable, (c) Category I non friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The following section summarizes the sample numbers, locations, type material, asbestos type, percent of asbestos detected, present condition of the asbestos containing material, potential for disturbance, and hazard assessment ratings. The asbestos sample laboratory analyses and chain of custody records are included at the end of this report.

**Asbestos Abbreviations and Hazard Assessment Key**

The EPA and SCDHEC require that confirmed ACBM is given a hazard assessment based on its present condition and potential for future disturbance. This hazard assessment is used as a tool for prioritization in future remedial actions regarding the ACBM. The following key demonstrates the criteria that make up the hazard assessment.

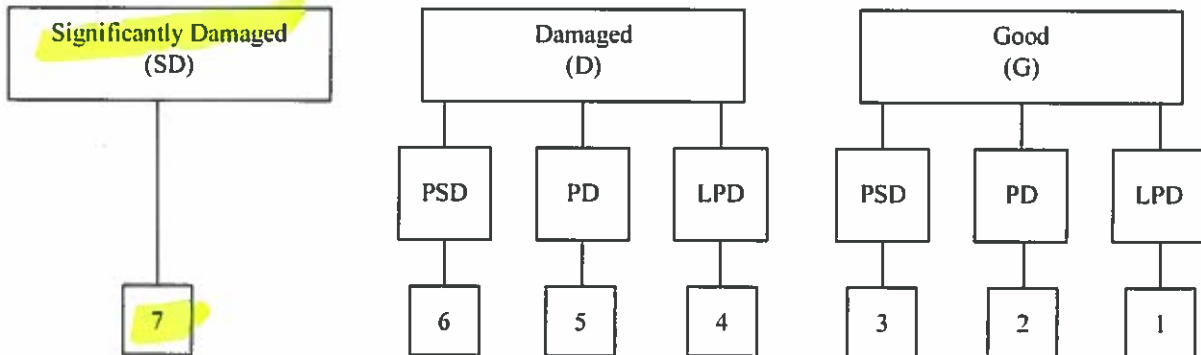
**Present Condition**

- F = Friable
- NF = Non-friable
- G = Good (very localized limited damage)
- D = Damaged (<10% distributed and/or <25% localized)
- S = Significantly Damaged ( $\geq$ 10% distributed and/or 25% localized)

**Potential for Future Disturbance**

- LPD = Low Potential for Disturbance (Contact, Vibration, and/or Air Erosion – low concern)
- PD = Potential for Damage (Contact, Vibration, and/or Air Erosion – moderate concern)
- PSD = Potential for Significant Damage (Contact, Vibration and/or Air Erosion – high concern)

**Hazard Assessment**



**HOMOGENOUS AREA ESTIMATED FOOTAGE TABLE**  
**Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC**

| HOMOGENOUS AREA ID # | DESCRIPTION                                  | ESTIMATED AMOUNT |
|----------------------|--|------------------|
| <b>01</b>            | <b>Transite Siding</b>                       | <b>1,440 SF</b>  |
| 02                   | Siding Felt                                  | 1,400 SF         |
| 03                   | Window Glazing                               | 44 SF            |
| <b>04</b>            | <b>Exterior Caulk</b>                        | <b>80 SF</b>     |
| 05                   | Roof Shingle                                 | 960 SF           |
| 06                   | Roof Felt                                    | 960 SF           |
| 07                   | Brick Mastic (black)                         | 8 SF             |
| 08                   | 16" Self-Stick Floor Tile (gray stone)       | 100 SF           |
| 09                   | Vinyl Sheet Flooring (gray/white squares)    | 100 SF           |
| 10                   | 12" Self-Stick Floor Tile (slate)            | 50 SF            |
| 11                   | Vinyl Sheet Flooring (green pebble)          | 140 SF           |
| 12                   | Vinyl Mastic (black)                         | 140 SF           |
| <b>13</b>            | <b>9" Floor Tile (beige)</b>                 | <b>200 SF</b>    |
| <b>14</b>            | <b>Floor Tile Mastic (black)</b>             | <b>336 SF</b>    |
| <b>15</b>            | <b>Vinyl Sheet Flooring (yellow squares)</b> | <b>50 SF</b>     |
| <b>16</b>            | <b>Vinyl Mastic (black)</b>                  | <b>50 SF</b>     |
| 17                   | Vinyl Sheet Flooring (beige)                 | 50 SF            |
| 18                   | Vinyl Sheet Flooring (beige slate)           | 100 SF           |
| 19                   | Drywall                                      | 3,200 SF         |
| <b>20</b>            | <b>Joint Compound</b>                        | <b>3,200 SF</b>  |

**ASBESTOS SUMMARY**  
**Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC**

| DESCRIPTION                           | TYPE                      | ESTIMATED AMOUNT |
|---------------------------------------|---------------------------|------------------|
| Transite Siding                       | Category II – Non Friable | 1,440 SF         |
| Exterior Caulk                        | Category I – Non Friable  | 80 SF            |
| 9” Floor Tile (beige) / Mastic        | RACM – Friable            | 200 SF           |
| Vinyl Sheet Flooring (yellow squares) | RACM – Friable            | 50 SF            |
| Vinyl Mastic (black)                  | Category I – Non Friable  | 50 SF            |
| Drywall/Joint Compound                | RACM - Friable            | 3,200 SF         |

RACM – Regulated Asbestos Containing Material

\*PACM - Presumed Asbestos Containing Material

*SCDHEC requires any non-friable material that is identified in an asbestos inspection report in a condition other than good and non-friable must be handled as a Regulated Asbestos Containing Material (RACM) and identified as friable on the asbestos abatement application. This requirement is reflected in the Asbestos Summary Table listed above.*

Asbestos fibers were identified in the Transite Siding. Approximately 1,440 square feet is present and in good condition. This material is considered Category II – Non Friable Asbestos and is located on the exterior walls.

Asbestos fibers were identified in the Exterior Caulk. Approximately 80 square feet is present and in good condition. This material is considered Category I – Non Friable Asbestos and is located around exterior windows and doors.

Asbestos fibers were identified in the 9” Floor Tile (beige) and the associated Floor Tile Mastic (black). Approximately 236 square feet of each is present and is significantly damaged condition. These materials are considered RACM – Friable Asbestos and are located in Bedroom B (layer 2) and Bedroom A (layer 1). **Note: Floor Tiles may be located under cabinets, appliance and non-load bearing walls.**

Asbestos fibers were identified in the Vinyl Sheet Flooring (yellow squares) and the associated Floor Tile Mastic (black). Approximately 50 square feet is present and in good condition. The materials are considered RACM – Friable Asbestos and is located in Bathroom A. (layer 2) **Note: Floor Tiles may be located under cabinets, appliance and non-load bearing walls.**

**The estimated quantities provided should be verified by contractor and/or building owner. Any discrepancies are to be addressed prior to removal of ACM. Please note that removal costs vary depending on the contractor, the quantity/condition of the ACM, and the accessibility/location of the ACM.**

## ASBESTOS SAMPLE DATA TABLE Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |   |                     |               | LABORATORY       |          | ASSESSMENT OF MATERIALS       |                            |
|---------------------------------|---|---------------------|---------------|------------------|----------|-------------------------------|----------------------------|
| Homogeneous Area & Sample ID    | Description                               | Location/Room #     | Friable (Y/N) | Asbestos Present |          | Condition Assessment Category | Hazard Assessment Category |
|                                 |   |                     |               | Percent          | Asbestos |                               |                            |
| 01-01                           | Transite Panel                            | Exterior Siding     | N             | 10.0%            | CHRY     | 7                             | 3                          |
| 01-02                           | Transite Panel                            | Exterior Siding     | N             | NT               | PACM     | 7                             | 3                          |
| 01-03                           | Transite Panel                            | Exterior Siding     | N             | NT               | PACM     | 7                             | 3                          |
| 02-04                           | Siding Felt                               | Exterior Siding     | N             | 0.0%             | ND       | 7                             | N/A                        |
| 02-05                           | Siding Felt                               | Exterior Siding     | N             | 0.0%             | ND       | 7                             | N/A                        |
| 02-06 T                         | Siding Felt                               | Exterior Siding     | N             | 0.0%             | ND       | 7                             | N/A                        |
| 03-07                           | Window Glazing                            | Window 1            | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 03-08                           | Window Glazing                            | Window 2            | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 03-09 T                         | Window Glazing                            | Window 3            | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 04-10                           | Exterior Caulk                            | Window              | N             | 2.0%             | CHRY     | 7                             | 1                          |
| 04-11                           | Exterior Caulk                            | Door                | N             | NT               | PACM     | 7                             | 1                          |
| 04-12                           | Exterior Caulk                            | Door                | N             | NT               | PACM     | 7                             | 1                          |
| 05-13                           | Roof Shingle                              | Exterior Roof       | N             | 0.0%             | ND       | 7                             | N/A                        |
| 05-14                           | Roof Shingle                              | Exterior Roof       | N             | 0.0%             | ND       | 7                             | N/A                        |
| 05-15 T                         | Roof Shingle                              | Exterior Roof       | N             | 0.0%             | ND       | 7                             | N/A                        |
| 06-16                           | Roof Felt                                 | Exterior Roof       | N             | 0.0%             | ND       | 7                             | N/A                        |
| 06-17                           | Roof Felt                                 | Exterior Roof       | N             | 0.0%             | ND       | 7                             | N/A                        |
| 06-18 T                         | Roof Felt                                 | Exterior Roof       | N             | 0.0%             | ND       | 7                             | N/A                        |
| 07-19                           | Brick Mastic (black)                      | Exterior Roof       | N             | 0.0%             | ND       | 7                             | N/A                        |
| 07-20                           | Brick Mastic (black)                      | Exterior Roof       | N             | 0.0%             | ND       | 7                             | N/A                        |
| 07-21 T                         | Brick Mastic (black)                      | Exterior Roof       | N             | 0.0%             | ND       | 7                             | N/A                        |
| 08-22                           | 16" Self-Stick Floor Tile (gray stone)    | Kitchen B – Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 08-23                           | 16" Self-Stick Floor Tile (gray stone)    | Kitchen B – Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 08-24 T                         | 16" Self-Stick Floor Tile (gray stone)    | Kitchen B – Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 09-25                           | Vinyl Sheet Flooring (gray/white squares) | Kitchen B – Layer 2 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 09-26                           | Vinyl Sheet Flooring (gray/white squares) | Kitchen B – Layer 2 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 09-27 T                         | Vinyl Sheet Flooring (gray/white squares) | Kitchen B – Layer 2 | N             | 0.0%             | ND       | 7                             | N/A                        |

Assessment Categories

- (1) Thermal Systems Insulation – Good Condition
- (2) Thermal Systems Insulation – Damaged
- (3) Thermal Systems Insulation – Significantly Damaged
- (4) Surfacing – Good Condition

- (5) Surfacing – Damaged
- (6) Surfacing – Significantly Damaged
- (7) Miscellaneous – Good Condition
- (8) Miscellaneous – Damaged
- (9) Miscellaneous – Significantly Damaged

Asbestos Present

- AMOS – Amosite
- CHRY – Chrysotile
- CROC – Crocidolite
- ANTH – Anthophyllite
- TREM – Tremolite
- ACTI – Actinolite
- ND – None Detected
- NT – Not Tested
- PACM – Presumed ACM
- Asbestos Detected**

## ASBESTOS SAMPLE DATA TABLE

### Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |                                       |                    |               | LABORATORY       |          | ASSESSMENT OF MATERIALS       |                            |
|---------------------------------|---------------------------------------|--------------------|---------------|------------------|----------|-------------------------------|----------------------------|
| Homogeneous Area & Sample ID    | Description                           | Location/Room #    | Friable (Y/N) | Asbestos Present |          | Condition Assessment Category | Hazard Assessment Category |
|                                 |                                       |                    |               | Percent          | Asbestos |                               |                            |
| 10-28                           | 12" Self-Stick Floor Tile (slate)     | Bathroom B         | N             | 0.0%             | ND       | 7                             | N/A                        |
| 10-29                           | 12" Self-Stick Floor Tile (slate)     | Bathroom B         | N             | 0.0%             | ND       | 7                             | N/A                        |
| 10-30 T                         | 12" Self-Stick Floor Tile (slate)     | Bathroom B         | N             | 0.0%             | ND       | 7                             | N/A                        |
| 11-31                           | Vinyl Sheet Flooring (green pebble)   | Living Room B      | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 11-32                           | Vinyl Sheet Flooring (green pebble)   | Living Room B      | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 11-33 T                         | Vinyl Sheet Flooring (green pebble)   | Living Room B      | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 12-34                           | Vinyl Mastic (black)                  | Living Room B      | N             | 0.0%             | ND       | 7                             | N/A                        |
| 12-35                           | Vinyl Mastic (black)                  | Living Room B      | N             | 0.0%             | ND       | 7                             | N/A                        |
| 12-36 T                         | Vinyl Mastic (black)                  | Living Room B      | N             | <1.0%            | CHRY     | 7                             | N/A                        |
| 13-37                           | 9" Floor Tile (beige)                 | Bedroom B          | N             | 3.0%             | CHRY     | 8                             | 6                          |
| 13-38                           | 9" Floor Tile (beige)                 | Bedroom B          | N             | NT               | PACM     | 8                             | 6                          |
| 13-39                           | 9" Floor Tile (beige)                 | Bedroom A          | N             | NT               | PACM     | 8                             | 6                          |
| 14-40                           | Floor Tile Mastic (black)             | Bedroom B          | N             | 8.0%             | CHRY     | 7                             | 1                          |
| 14-41                           | Floor Tile Mastic (black)             | Bedroom B          | N             | NT               | PACM     | 7                             | 1                          |
| 14-42                           | Floor Tile Mastic (black)             | Bedroom A          | N             | NT               | PACM     | 7                             | 1                          |
| 15-43                           | Vinyl Sheet Flooring (yellow squares) | Bathroom A Layer 2 | Y             | 20.0%            | CHRY     | 7                             | 1                          |
| 15-44                           | Vinyl Sheet Flooring (yellow squares) | Bathroom A Layer 2 | Y             | NT               | PACM     | 7                             | 1                          |
| 15-45                           | Vinyl Sheet Flooring (yellow squares) | Bathroom A Layer 2 | Y             | NT               | PACM     | 7                             | 1                          |
| 16-46                           | Vinyl Mastic (black)                  | Bathroom A Layer 2 | N             | 5.0%             | CHRY     | 7                             | 1                          |
| 16-47                           | Vinyl Mastic (black)                  | Bathroom A Layer 2 | N             | NT               | PACM     | 7                             | 1                          |
| 16-48                           | Vinyl Mastic (black)                  | Bathroom A Layer 2 | N             | NT               | PACM     | 7                             | 1                          |
| 17-49                           | Vinyl Sheet Flooring (beige)          | Bathroom A Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 17-50                           | Vinyl Sheet Flooring (beige)          | Bathroom A Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |

**Assessment Categories**

- (1) Thermal Systems Insulation – Good Condition
- (2) Thermal Systems Insulation – Damaged
- (3) Thermal Systems Insulation – Significantly Damaged
- (4) Surfacing – Good Condition

- (5) Surfacing – Damaged
- (6) Surfacing – Significantly Damaged
- (7) Miscellaneous – Good Condition
- (8) Miscellaneous – Damaged
- (9) Miscellaneous – Significantly Damaged

**Asbestos Present**

- AMOS – Amosite
- CHRY – Chrysotile
- CROC – Crocidolite
- ANTH – Anthophyllite
- TREM – Tremolite
- ACTI – Actinolite
- ND – None Detected
- NT – Not Tested
- PACM – Presumed ACM
- Asbestos Detected**

## ASBESTOS SAMPLE DATA TABLE Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |                                    |                    |               | LABORATORY       |          | ASSESSMENT OF MATERIALS       |                            |
|---------------------------------|------------------------------------|--------------------|---------------|------------------|----------|-------------------------------|----------------------------|
| Homogeneous Area & Sample ID    | Description                        | Location/Room #    | Friable (Y/N) | Asbestos Present |          | Condition Assessment Category | Hazard Assessment Category |
|                                 |                                    |                    |               | Percent          | Asbestos |                               |                            |
| 17-51 T                         | Vinyl Sheet Flooring (beige)       | Bathroom A Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 18-52                           | Vinyl Sheet Flooring (beige slate) | Kitchen – Layer 1  | N             | 0.0%             | ND       | 7                             | N/A                        |
| 18-53                           | Vinyl Sheet Flooring (beige slate) | Kitchen – Layer 1  | N             | 0.0%             | ND       | 7                             | N/A                        |
| 18-54                           | Vinyl Sheet Flooring (beige slate) | Kitchen – Layer 1  | N             | 0.0%             | ND       | 7                             | N/A                        |
| 19-55                           | Drywall                            | Kitchen A          | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 19-56                           | Drywall                            | Kitchen A          | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 19-57                           | Drywall                            | Kitchen A          | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 20-58                           | Joint Compound                     | Bedroom A          | Y             | 2.0%             | CHRY     | 4                             | 3                          |
| 20-59                           | Joint Compound                     | Bedroom A          | Y             | NT               | PACM     | 4                             | 3                          |
| 20-60                           | Joint Compound                     | Bedroom A          | Y             | NT               | PACM     | 4                             | 3                          |
| 20-61                           | Joint Compound                     | Bedroom A          | Y             | NT               | PACM     | 4                             | 3                          |
| 20-62                           | Joint Compound                     | Bedroom A          | Y             | NT               | PACM     | 4                             | 3                          |

**Assessment Categories**

- |  |   |
|--|---|
| (1) Thermal Systems Insulation – Good Condition        | (5) Surfacing – Damaged                   |
| (2) Thermal Systems Insulation – Damaged               | (6) Surfacing – Significantly Damaged     |
| (3) Thermal Systems Insulation – Significantly Damaged | (7) Miscellaneous – Good Condition        |
| (4) Surfacing – Good Condition                         | (8) Miscellaneous – Damaged               |
|  | (9) Miscellaneous – Significantly Damaged |

**Asbestos Present**

- |                      |                          |
|----------------------|--------------------------|
| AMOS – Amosite       | ACTI – Actinolite        |
| CHRY – Chrysotile    | ND – None Detected       |
| CROC – Crocidolite   | NT – Not Tested          |
| ANTH – Anthophyllite | PACM – Presumed ACM      |
| TREM – Tremolite     | <b>Asbestos Detected</b> |



## CONCLUSIONS/RECOMMENDATIONS

### Asbestos Inspection

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 18, 2018 of the Commercial Building located at 1240 Yeamans Hall Road in Hanahan, South Carolina did reveal the presence of ACBM. Renovation or demolition activities that will disturb the ACBM will require removal per state and federal regulations. Asbestos materials can become hazardous when, due to damage, disturbance, or deterioration over time, they release asbestos fibers into the air of the building. All areas that contain asbestos should be utilized in a controlled manner to reduce the potential for disturbance. OSHA requires notification to all trades/contractors about the condition of the ACBM to prevent possible occupational exposures.

Demolition activities in public and commercial buildings are regulated by OSHA, EPA, and SCDHEC. Code 40 of Federal Regulations Part 61, Subpart M, Final Rule, "National Emissions Standards for Hazardous Air Pollutants" (NESHAP), and SCDHEC Regulation 61-86.1 require the proper removal and disposal of ACBM that is affected by renovation or demolition. Demolition of the subject structures will require written notification, proper transportation, and disposal per state and federal regulations.



**PHOTOGRAPHS**

**Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC**



**HOMOGENEOUS AREA 01  
TRANSITE PANEL**



**HOMOGENEOUS AREA 02  
SIDING FELT**



**HOMOGENEOUS AREA 03  
WINDOW GLAZING**



**HOMOGENEOUS AREA 04  
EXTERIOR CAULK**



**HOMOGENEOUS AREA 05  
ROOF SHINGLE**



**HOMOGENEOUS AREA 06  
ROOF FELT**

**PHOTOGRAPHS**

**Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC**



**HOMOGENEOUS AREA 07  
BRICK MASTIC (BLACK)**



**HOMOGENEOUS AREA 08  
16" SELF-STICK FLOOR TILE (GRAY STONE)**



**HOMOGENEOUS AREA 09  
VINYL SHEET FLOORING  
(GRAY/WHITE SQUARES)**



**HOMOGENEOUS AREA 10  
12" SELF-STICK FLOOR TILE  
(SLATE)**



**HOMOGENEOUS AREAS 11, 12  
VINYL SHEET FLOORING (GREEN PEBBLE)  
MASTIC (BLACK)**



**HOMOGENEOUS AREAS 13, 14  
9" FLOOR TILE (BEIGE)  
MASTIC (BLACK)**

## PHOTOGRAPHS

### Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC



HOMOGENEOUS AREAS 15, 16  
VINYL SHEET FLOORING  
(YELLOW SQUARES)  
MASTIC (BLACK)



HOMOGENEOUS AREA 17  
VINYL SHEET FLOORING (BEIGE)



HOMOGENEOUS AREA 18  
VINYL SHEET FLOORING (BEIGE SLATE)



HOMOGENEOUS AREA 19  
DRYWALL



HOMOGENEOUS AREA 20  
JOINT COMPOUND

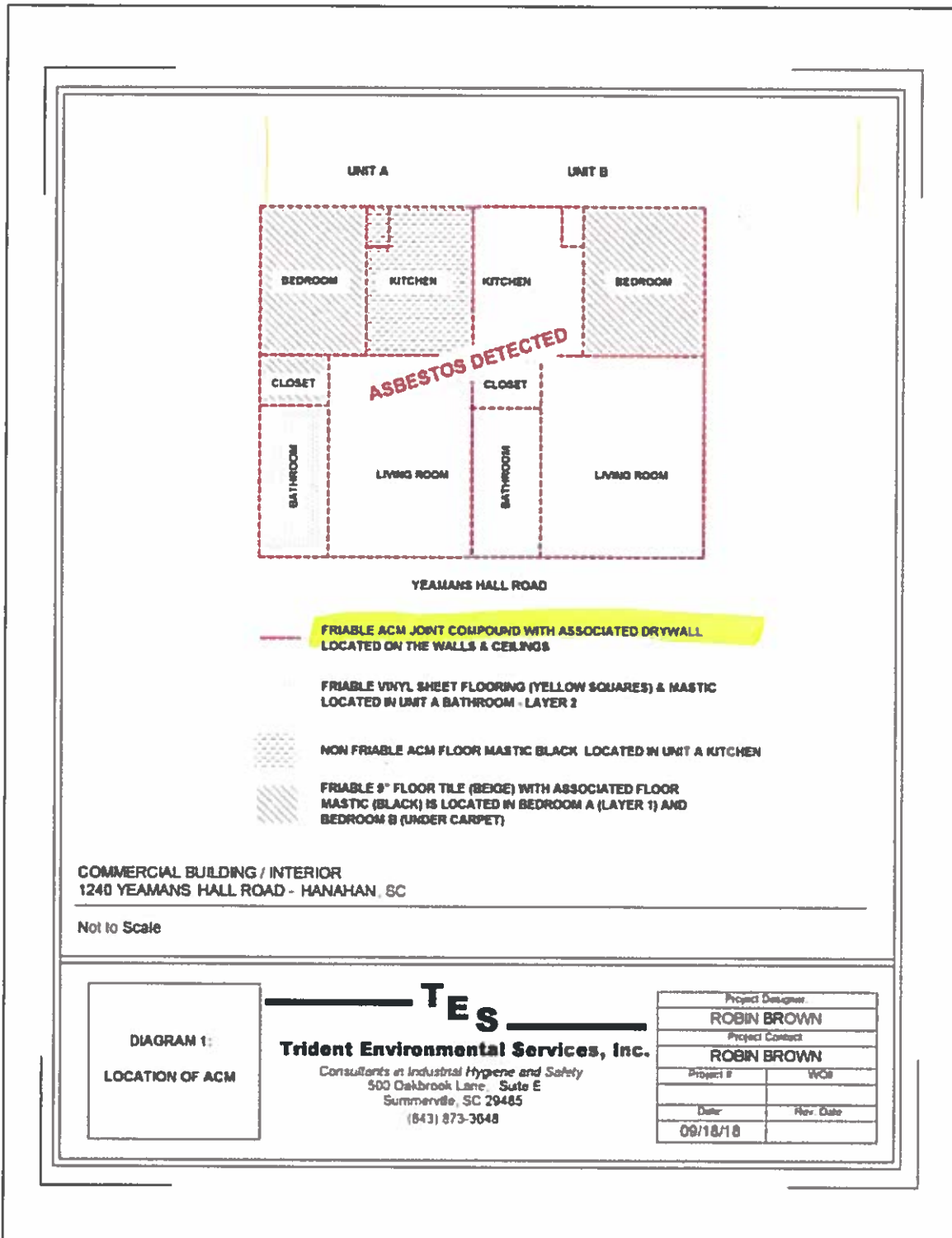
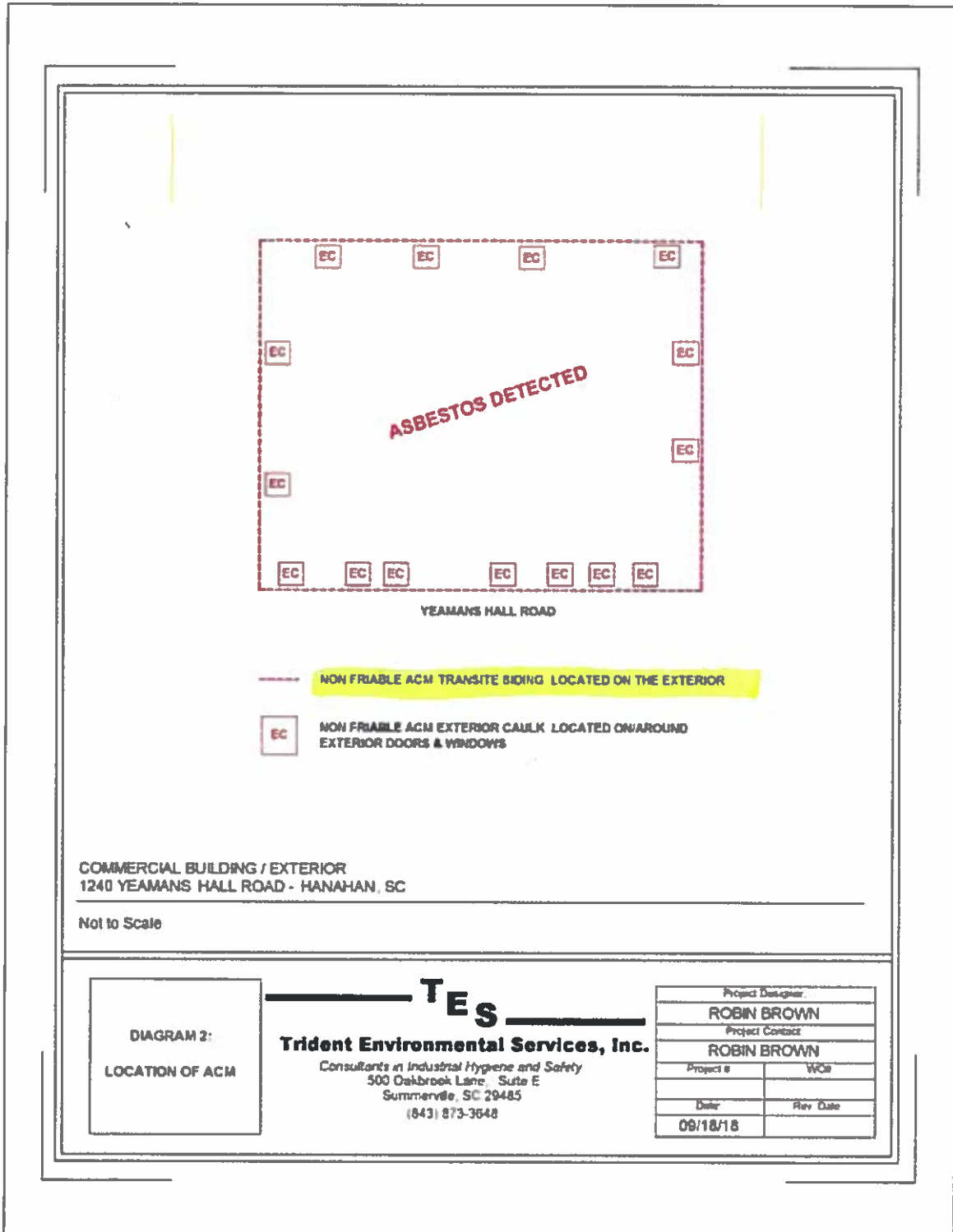


DIAGRAM 1:  
 LOCATION OF ACM

**TES**  
**Trident Environmental Services, Inc.**  
 Consultants in Industrial Hygiene and Safety  
 500 Oakbrook Lane - Suite E  
 Summerville, SC 29485  
 (843) 873-3648

|                  |           |
|------------------|-----------|
| Project Designer |           |
| ROBIN BROWN      |           |
| Project Contact  |           |
| ROBIN BROWN      |           |
| Project #        | W08       |
| Date             | Rev. Date |
| 09/18/18         |           |



## COMPREHENSIVE ASBESTOS SURVEY

Inspection Date: 09/18/2018

Preparation Date: 09/26/2018

Inspected & Prepared By:

*Hunter Hanson*

Hunter Hanson  
S.C. Inspector License BI – 01468

---

### SCDHEC ISSUED

Asbestos ID Card

---

**Hunter Hanson**



|                   |                 |                  |
|-------------------|-----------------|------------------|
| <b>CONSULTBI</b>  | <b>BI-01468</b> | Expiration Date: |
| <b>AIRSAMPLER</b> | <b>AS-00413</b> | <b>10/28/18</b>  |
|                   |                 | <b>01/06/19</b>  |

Reviewed By:

*Robin A. Brown*

Robin A. Brown  
S.C. Inspector License BI – 00613

---

### SCDHEC ISSUED

Asbestos ID Card

---

**Robin Brown**



|                   |                 |                  |
|-------------------|-----------------|------------------|
| <b>CONSULTPD</b>  | <b>PD-00176</b> | Expiration Date: |
| <b>CONSULTBI</b>  | <b>BI-00613</b> | <b>06/14/19</b>  |
| <b>AIRSAMPLER</b> | <b>AS-00178</b> | <b>06/26/19</b>  |
|                   |                 | <b>02/05/19</b>  |



United States Department of Commerce  
National Institute of Standards and Technology



**Certificate of Accreditation to ISO/IEC 17025:2005**

NVLAP LAB CODE: 200794-0

**Triangle Environmental Service Center, Inc.**  
Midlothian, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for

**Asbestos Fiber Analysis**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).

2018-04-01 through 2019-03-31

Effective Dates



A handwritten signature in black ink, which appears to read "Thomas S. Lamm".

For the National Voluntary Laboratory Accreditation Program

**NVLAP** National Voluntary  
Laboratory Accreditation Program



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

Triangle Environmental Service Center, Inc.  
13509 East Boundary Road, Suite B  
Midlothian, VA 23112  
Mr. Feng Jiang  
Phone: 804-739-1751 Fax: 804-739-1753  
Email: info@tesclab.com  
http://www.tesclab.com

**ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 200794-0**

**Bulk Asbestos Analysis**

| <u>Code</u> | <u>Description</u>   |
|-------------|--|
| IM/A01      | EPA - 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples |
| IM/A03      | EPA 600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials   |

  
For the National Voluntary Laboratory Accreditation Program



United States Department of Commerce  
National Institute of Standards and Technology



**Certificate of Accreditation to ISO/IEC 17025:2005**

NVLAP LAB CODE: 101904-0

**AmeriSci Richmond**  
Midlothian, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for

**Asbestos Fiber Analysis**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).

2018-07-01 through 2019-06-30

Effective Dates



*T. J. S. Sander*  
For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

AmeriSci Richmond  
dba AmeriSci Richmond  
13635 Genito Road  
Midlothian, VA 23112  
Mr. Thomas B. Keith  
Phone: 804-763-1200 Fax: 804-763-1800  
Email: [bkeith@amerisci.com](mailto:bkeith@amerisci.com)  
<http://www.amerisci.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101904-0

Bulk Asbestos Analysis

| <u>Code</u> | <u>Description</u>  |
|-------------|---|
| 18/A01      | EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples |
| 18/A03      | EPA 600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials  |

Airborne Asbestos Analysis

| <u>Code</u> | <u>Description</u>   |
|-------------|--|
| 18/A02      | U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A. |

For the National Voluntary Laboratory Accreditation Program

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middleburg, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180919C

DATE OF RECEIPT: 9/19/2018  
 DATE OF ANALYSIS: 9/19/2018  
 DATE OF REPORT: 9/19/2018

CLIENT JOB #:

JOB SITE: 1240 Yeamans Hall Rd.

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 1             | 01-01 / Gray granular, white fibers  | 10% Chrysotile       |                       | 90%                     |
| 2             | 01-02 /                              | Positive Stop        |                       | 100%                    |
| 3             | 01-03 /                              | Positive Stop        |                       | 100%                    |
| 4             | 02-04 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 5             | 02-05 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 6             | 02-06 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 7             | 03-07 / White powder                 | NAD                  |                       | 100%                    |
| 8             | 03-08 / White powder                 | NAD                  |                       | 100%                    |
| 9             | 03-09 /                              | Not Analyzed         |                       | 100%                    |
| 10            | 04-10 / White powder                 | 2% Chrysotile        |                       | 98%                     |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (EPA/600/5-93-010, July 1993) (EPA-600/5-93-010, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected, not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLA# Lab Code: 210794-0

(LEGEND: NAD=No Asbestos Detected, I mo =1 molecule, JC=Joint Compound)

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director  
 Juechang Fang, Senior Geologist

Wednesday, September 19, 2018

Page 1 of 7

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29483

TESC LOGIN # 180919C

DATE OF RECEIPT: 9/19/2018  
 DATE OF ANALYSIS: 9/19/2018  
 DATE OF REPORT: 9/19/2018

CLIENT JOB #:

JOB SITE: 1240 Yeamans Hall Rd.

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 11            | 04-11 /                              | Positive Stop        |                       | 100%                    |
| 12            | 04-12 /                              | Positive Stop        |                       | 100%                    |
| 13            | 05-13 / Black tar-like               | NAD                  | 20% Fiberglass        | 80%                     |
| 14            | 05-14 / Black tar-like               | NAD                  | 20% Fiberglass        | 80%                     |
| 15            | 05-15 /                              | Not Analyzed         |                       | 100%                    |
| 16            | 06-16 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 17            | 06-17 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 18            | 06-18 /                              | Not Analyzed         |                       | 100%                    |
| 19            | 07-19 / Black adhesive               | NAD                  |                       | 100%                    |
| 20            | 07-20 / Black adhesive               | NAD                  |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M4-R2-020, Dec 1992), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVTAP Lab Code: 2107944

[LEGEND: NAD=No Asbestos Detected, I mo =1 molecule, JC=Joint Compound]

Reviewed By: Authorized Signatory:

*Feng Jiang*

Feng Jiang, MS Senior Geologist, Laboratory Director  
 Jianqiang Jiang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180919C

DATE OF RECEIPT: 9/19/2018  
 DATE OF ANALYSIS: 9/19/2018  
 DATE OF REPORT: 9/19/2018

CLIENT JOB #:

JOB SITE: 1240 Yeamans Hall Rd.

ANALYST: B Trimmer

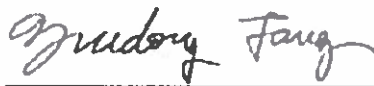
| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS          | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|--------------------------------|-------------------------|
| 21            | 07-21 /                              | Not Analyzed         |                                | 100%                    |
| 22            | 08-22 / Beige vinyl                  | NAD                  |                                | 100%                    |
| 23            | 08-23 / Beige vinyl                  | NAD                  |                                | 100%                    |
| 24            | 08-24 /                              | Not Analyzed         |                                | 100%                    |
| 25            | 09-25 / Gray limo. fibers            | NAD                  | 20% Cellulose<br>5% Fiberglass | 75%                     |
| 26            | 09-26 / Gray limo. fibers            | NAD                  | 20% Cellulose<br>5% Fiberglass | 75%                     |
| 27            | 09-27 /                              | Not Analyzed         |                                | 100%                    |
| 28            | 10-28 / Brown vinyl                  | NAD                  |                                | 100%                    |
| 29            | 10-29 / Brown vinyl                  | NAD                  |                                | 100%                    |
| 30            | 10-30 /                              | Not Analyzed         |                                | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/3-82-020, Dec. 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVTAP Lab Code: 218794-0

[LEGEND: NAD=No Asbestos Detected, Lmo = 1 molecule, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director  
 Juebing Fang, Senior Geologist

Wednesday, September 19, 2018

Page 1 of 7

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Midlothian, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180919C

DATE OF RECEIPT: 9/19/2018  
 DATE OF ANALYSIS: 9/19/2018  
 DATE OF REPORT: 9/19/2018

CLIENT JOB #:

JOB SITE: 1240 Yeamans Hall Rd.

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 11            | 11-11 / Green lino , black fibers    | NAD                  | 20% Cellulose         | 80%                     |
| 32            | 11-32 / Green lino , black fibers    | NAD                  | 20% Cellulose         | 80%                     |
| 11            | 11-11 /                              | Not Analyzed         |                       | 100%                    |
| 14            | 12-14 / Black adhesive               | NAD                  |                       | 100%                    |
| 35            | 12-35 / Black adhesive               | NAD                  |                       | 100%                    |
| 36            | 12-36 /                              | Not Analyzed         |                       | 100%                    |
| 37            | 13-37 / Brown vinyl                  | 3% Chrysotile        |                       | 97%                     |
| 38            | 13-38 /                              | Positive Stop        |                       | 100%                    |
| 19            | 13-19 /                              | Positive Stop        |                       | 100%                    |
| 40            | 14-40 / Black adhesive               | 8% Chrysotile        |                       | 92%                     |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M4-92-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected, not detected at/w below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the items tested.

NVI AP Lab Code: 200794-0

[LEGEND: NAD=No Asbestos Detected, fmo =1 molecule, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director  
 Juecheng Jiang, Senior Geologist

## TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180919C

DATE OF RECEIPT: 9/19/2018  
 DATE OF ANALYSIS: 9/19/2018  
 DATE OF REPORT: 9/19/2018

CLIENT JOB/ #:

JOB SITE: 1240 Yeamans Hall Rd.

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS          | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|--------------------------------|-------------------------|
| 41            | 14-41 /                              | Positive Stop        |                                | 100%                    |
| 42            | 14-42 /                              | Positive Stop        |                                | 100%                    |
| 43            | 15-43 / Beige vinyl gray fibers      | 20% Chrysotile       |                                | 80%                     |
| 44            | 15-44 /                              | Positive Stop        |                                | 100%                    |
| 45            | 15-45 /                              | Positive Stop        |                                | 100%                    |
| 46            | 16-46 / Black adhesive               | 5% Chrysotile        |                                | 95%                     |
| 47            | 16-47 /                              | Positive Stop        |                                | 100%                    |
| 48            | 16-48 /                              | Positive Stop        |                                | 100%                    |
| 49            | 17-49 / Beige lino . gray fibers     | NAD                  | 20% Cellulose<br>5% Fiberglass | 75%                     |
| 50            | 17-50 / Beige lino . gray fibers     | NAD                  | 20% Cellulose<br>5% Fiberglass | 75%                     |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/409/R-93-116, July 1993 (EPA-600/5-92-020), Dec. 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. (This test report relates only to the item(s) tested)

NVLAP Lab Code: 210794-0

(LEGEND: NAD=No Asbestos Detected, I mo = I molecule, JC=Joint Compound)

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director  
 Jueheng Jiang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 580 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180919C

DATE OF RECEIPT 9/19/2018  
 DATE OF ANALYSIS 9/19/2018  
 DATE OF REPORT 9/19/2018

CLIENT JOB/ #:

JOB SITE: 1240 Yeamans Hall Rd.

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS          | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|--------------------------------|-------------------------|
| 51            | 17-51 /                              | Not Analyzed         |                                | 100%                    |
| 52            | 18-52 / Brown lino , gray fibers     | NAD                  | 20% Cellulose<br>5% Fiberglass | 75%                     |
| 53            | 18-53 / Brown lino , gray fibers     | NAD                  | 20% Cellulose                  | 80%                     |
| 54            | 18-54 /                              | Not Analyzed         |                                | 100%                    |
| 55            | 19-55 / White powder, brown fibers   | NAD                  | 20% Cellulose                  | 80%                     |
| 56            | 19-56 / White powder, brown fibers   | NAD                  | 20% Cellulose                  | 80%                     |
| 57            | 19-57 / White powder, brown fibers   | NAD                  | 20% Cellulose                  | 80%                     |
| 58            | 20-58 / White powder                 | 2% Chrysotile        |                                | 98%                     |
| 59            | 20-59 /                              | Positive Stop        |                                | 100%                    |
| 60            | 20-60 /                              | Positive Stop        |                                | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/3-82-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected = not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. (This test report relates only to the item(s) tested.)

NVLAP Lab Code: 200794-0

(LEGEND: NAD=No Asbestos Detected, I mo =I molecule, JC=Joint Compound)

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director  
 Juechung Fung, Senior Geologist

Wednesday, September 19, 2018

Page 6 of 7



**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180919C

DATE OF RECEIPT: 9/19/2018  
 DATE OF ANALYSIS: 9/19/2018  
 DATE OF REPORT: 9/19/2018

CLIENT JOB / #:

JOB SITE: 1240 Yeamans Hall Rd.

ANALYST: B. Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 61            | 20-61 /                              | Positive Stop        |                       | 100%                    |
| 62            | 20-62 /                              | Positive Stop        |                       | 100%                    |

**Total Samples/Layers Analyzed: 35**

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/54-82-020), Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected = not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0

[LEGEND: NAD=No Asbestos Detected, I=Ino =Inorganic, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director  
 Juechang Fang, Senior Geologist

Wednesday, September 19, 2018

Page 7 of 7

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13599 East Boundary Road, Suite B, Middleham, VA 23112 • 804-739-1751 • fax: 804-739-1753

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 540 Oatbrook Lane, Suite E  
 Summerville, SC 29485

CLIENT PROJECT #: 1240 Yeamans Hall Rd  
 TAT: 1 Days

TESC LOGIN #: INP19K  
 ANALYST: J. Turner

DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/21/2018  
 DATE OF REPORT: 09/23/2018

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
| 1             | 03-09           | 0.518             | 7.3                      | 85.7                     | 7                                  | NAD              |
| 2             | 05-15           | 0.467             | 20.8                     | 45                       | 34.2                               | NAD              |
| 3             | 06-18           | 0.823             | 97.6                     | 1.8                      | .6                                 | NAD              |
| 4             | 07-21           | 0.421             | 99.3                     | .5                       | .2                                 | NAD              |
| 5             | 08-24           | 0.551             | 27.8                     | 69.5                     | 2.7                                | NAD              |

*Judyong Fung*  
 Judyong Fung, M.S. Senior Geologist, Laboratory Director  
 Triad Engineering, Science & Design

Reviewed By: Authorized Signatory:

This report must not be reproduced except in full with the approval of TES, Inc. The test report relates only to the items listed. This test was performed by an NVLAP Accredited ILM Lab. NVLAP Lab ID #: 1019240. ILM analysis by EPA 608(R-9) (to not covered by NVLAP) (bulk accreditation) (ELEMENT) NAD - No Asbestos Detected; NA - Not Analyzed; PS - Positive; Neg. - 1% NVA - No Visual Asbestos

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13599 East Broadway Road, Suite B, Middleburg, VA 23112 • 803-729-1751 • Fax: 803-729-1753

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 540 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 18M19K

DATE OF RECEIPT: 09/19/2018

DATE OF ANALYSIS: 09/21/2018

DATE OF REPORT: 09/23/2018

ANALYST: J. Turner

CLIENT PROJECT #: 1240 Yeamans Hall Rd

JOBSITE: TAT

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
| 6             | 09-27           | 0.306             | 72.2                     | 10.8                     | 17                                 | NAD              |
| 7             | 10-30           | 0.576             | 36.8                     | 49.0                     | 14.4                               | NAD              |
| 8             | 11-33           | 0.366             | 76.8                     | 23                       | 2                                  | NAD              |
| 9             | 12-36           | 0.432             | 43.1                     | 12.5                     | 44.4                               | <1% Chrysotile   |
| 10            | 17-51           | 0.415             | 64.8                     | 34.9                     | 3                                  | NAD              |

*Judyong Fang*

Reviewed By Authorized Signatory:

Judyong Fang, Science (Analyst)

This report must not be reproduced except in full with the approval of TES, Inc. The test report relates only to the item(s) tested. This test was performed by an NVLAP Accredited IEM Lab, NVLAP Lab ID # 10193249. IEM analysis by EPA 600/R-93/116 (not covered by NVLAP) (bulk accreditation) [ILLUSTRATION] NAD - No Asbestos Detected; NA - Not Analyzed; IS - Positive; Neg. Trace - 1% NVA - No Visual Asbestos

September 24, 2018

Page 2 of 1

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13599 East Boundary Road, Suite B, Middleburg, VA 22112 • 804-739-1751 • Fax: 804-739-1750

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 5400 Oatbrook Lane, Suite E  
 Summerville, SC 29485

TES: LOGIN # INM19K  
 DATE OF RECEIPT 09/19/2018  
 DATE OF ANALYSIS 09/21/2018  
 DATE OF REPORT 09/24/2018  
 ANALYST J. Turner

CLIENT PROJECT #  
 JOBSITE: 1240 Yeamans Hall Rd  
 TAT:

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
| 11            | 10-54           | 0.295             | 51.2                     | 40.5                     | 3                                  | NAD              |

Total Sample(s) Analyzed: 11

*Judyong Fang*

Reviewed By: Authorized Signatory

Fang, Jiang, JES Senior Geologist, Laboratory Director  
 Jending Fang, Senior Geologist

This report must not be reproduced except in full with the approval of TES, Inc. The test report refers only to the items tested. This test was performed by an NVLAP accredited ILM Lab. NVLAP Lab ID: 1019440. ILM analysis by PDA 608.R.93 (not covered by NVLAP High accreditation) (ILLUSTR) NAD - No Asbestos Detected; NA - Not Analyzed; PS - Positive; Slip, Truce - 1% NVA - No Visual Asbestos

September 24, 2018

Page 1 of 1

**TRIANGLE ENVIRONMENTAL SERVICE CENTER**

**TESC LOGIN NUMBER:** 180919C

**CHAIN OF CUSTODY FORM**  
 13609 East Boundary Road, Suite B • Midlothian • VA • 23112 • Tel: 804-739-1781 • Fax: 804-739-1753

**LAB CUSTOMER:** Trident Environmental Services, Inc.  
 ADDRESS: 500 Oakbrook Lane - Suite E  
 CITY, STATE, ZIP: Summerville, SC 29485

**DATE:** 9-18-18  
**CONTACT NAME:** Robin Brown

**PROJECT #:**  
**PROJECT SITE:** 1240 Yeamans Hall Rd

**TAT:** 2 Hour: \_\_\_\_\_ 6 Hour: 24 Hour: 3 Day: 3 Day: 20 5 Day: \_\_\_\_\_  
**CONTACT METHOD:** Phone: 843-873-3648 Fax: 888-266-2040 Email: On TESC File

| Sample number                     | Sample Date                   | Asbestos                         |                 |                     |                      |                 |                      |               |                     |                |                 |            |      | Lead      |              |                     |             |        |              | Other Metals        |           |       |              |              |      | Air Quality/Mold |                 |                   |  | Comments |  |
|-----------------------------------|-------------------------------|----------------------------------|-----------------|---------------------|----------------------|-----------------|----------------------|---------------|---------------------|----------------|-----------------|------------|------|-----------|--------------|---------------------|-------------|--------|--------------|---------------------|-----------|-------|--------------|--------------|------|------------------|-----------------|-------------------|--|----------|--|
|                                   |                               | Bulk ID by PLM                   | PCM Fiber Count | PLM Point Count 400 | PLM Point Count 1000 | PLM Gravimetric | CARB 435 (Soil only) | TEM AHERA Air | TEM Bulk Chertfield | Soil (%) & PPM | Paint (%) & PPM | Soil (ppm) | Wipe | TCLP (Pb) | Master Water | Drinking Water (Pb) | TCLP RCRA 8 | CAM 17 | Welding Fume | Toxic Metal Profile | Bioassays | Slide | Surface Tape | Surface Swab | Bulk | Air Volume (L)   | Wipe Area (ft²) | Scrape Area (cm²) |  |          |  |
| Released by: <u>Hunter Hudson</u> | Signature: <u>[Signature]</u> | Date/Time: <u>9-18-18 9:11am</u> |                 |                     |                      |                 |                      |               |                     |                |                 |            |      |           |              |                     |             |        |              |                     |           |       |              |              |      |                  |                 |                   |  |          |  |
| Received by:                      | Signature: <u>[Signature]</u> | Date/Time:                       |                 |                     |                      |                 |                      |               |                     |                |                 |            |      |           |              |                     |             |        |              |                     |           |       |              |              |      |                  |                 |                   |  |          |  |
| Released by:                      | Signature: <u>[Signature]</u> | Date/Time:                       |                 |                     |                      |                 |                      |               |                     |                |                 |            |      |           |              |                     |             |        |              |                     |           |       |              |              |      |                  |                 |                   |  |          |  |
| Received by:                      | Signature: <u>[Signature]</u> | Date/Time:                       |                 |                     |                      |                 |                      |               |                     |                |                 |            |      |           |              |                     |             |        |              |                     |           |       |              |              |      |                  |                 |                   |  |          |  |

Prepared by TESC [Signature] Positive for Asbestos. [Signature] See other pages for details. Pages: \_\_\_ of \_\_\_

**TES** 180919C

Trident Environmental Services, Inc.  
 Consultants in Industrial Hygiene and Safety  
 500 Calhoun Lane, Suite E  
 Summerville, SC 29485  
 Phone (843) 873-3648  
 Fax (843) 873-1787

**CHAIN OF CUSTODY FORM**  
 Asbestos Bulk Samples

Project Name: 1240 Yeamans Hall Rd Date: 9-18-18  
 Location: Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |           |                 |                |             | ASSESSMENT OF MATERIALS |               |           |          |  |
|---------------------------------|-----------|-----------------|----------------|-------------|-------------------------|---------------|-----------|----------|--|
| Nearest Area                    | Sample ID | Location        | Description    | Friable (+) | Friable (-)             | Asbestos Type | DDMS Assn | HAZ Assn |  |
|                                 | 01        | Exterior Siding | Transite Panel |             | /                       |               |           |          |  |
|                                 | 02        |                 |                |             |                         |               |           |          |  |
|                                 | 03        |                 |                |             |                         |               |           |          |  |
|                                 | 04        | ↓               | Siding Felt    |             | /                       |               |           |          |  |
|                                 | 05        |                 |                |             |                         |               |           |          |  |
|                                 | 06        |                 |                |             |                         |               |           |          |  |
|                                 | 07        | Window 1        | Window Glazing | /           |                         |               |           |          |  |
|                                 | 08        | Window 2        |                |             |                         |               |           |          |  |
|                                 | 09        | Window 3        |                |             |                         |               |           |          |  |
|                                 | 10        | Window          | Exterior Caulk |             | /                       |               |           |          |  |
|                                 | 11        | Door            |                |             |                         |               |           |          |  |
|                                 | 12        | Door            |                |             |                         |               |           |          |  |
|                                 | 13        | Exterior Roof   | Roof Shingle   |             | /                       |               |           |          |  |
|                                 | 14        | ↓               | Roof Felt      |             | /                       |               |           |          |  |
|                                 | 15        |                 |                |             |                         |               |           |          |  |
|                                 | 16        |                 |                |             |                         |               |           |          |  |
|                                 | 17        |                 |                |             |                         |               |           |          |  |
|                                 | 18        |                 |                |             |                         |               |           |          |  |
|                                 | 19        |                 | Bulk Material  |             | /                       |               |           |          |  |
|                                 | 20        | ↓               |                |             |                         |               |           |          |  |
|                                 | 21        |                 |                |             |                         |               |           |          |  |

**CONDUCION Assessment Categories**

(1) Thermal Systems Insulation - Good Condition  
 (2) Thermal Systems Insulation - Damaged  
 (3) Thermal Systems Insulation - Significantly Damaged  
 (4) Surfacing - Good Condition  
 (5) Surfacing - Damaged  
 (6) Surfacing - Significantly Damaged

**Asbestos Product**

(1) Aracells  
 (2) Chrysotls  
 (3) Crocidolite  
 (4) Amphibylite  
 (5) Tremolite  
 (6) Actinolite

**HAZARD Assessment Categories**

D = Good Condition  
 D = Damaged  
 S = Significantly Damaged  
 LPD = Low Potential for Disturbance

Samples Collected by: Hunter Brown Date / Time: 9-18-18  
 Samples Received by: North King Date / Time: 9/18/18 9:40am

*OK*



180919C

**TES**  
 Trident Environmental Services, Inc.  
 Consultants in Industrial Hygiene and Safety  
 500 Oatbrook Lane, Suite E  
 Summerville, SC 29405  
 Phone (843) 873-3848  
 Fax (843) 873-1767

**CHAIN OF CUSTODY FORM**  
 Asbestos Bulk Samples

Project Name: 1240 Yeamans Hall Rd. Date: 9-18-18  
 Location: Hanahan SC

| DESCRIPTION OF EACH SAMPLE AREA |        |               |  |              |              | ASSESSMENT OF MATERIALS |             |            |
|---------------------------------|--------|---------------|--|--------------|--------------|-------------------------|-------------|------------|
| Rooming Area                    | Sam. # | Location      | Description  | Priority (+) | Priority (-) | Asbestos Type           | COND Assess | HAZ Assess |
| 08                              | 22     | Kitchen B C1  | 16" Self Stick tile<br>(Grey stone)                |              | X            |                         |             |            |
|                                 | 23     |               |  |              |              |                         |             |            |
|                                 | 24     |               |  |              |              |                         |             |            |
| 09                              | 25     | Kitchen B C2  | Vinyl Sheet flooring<br>(Grey/white sq)<br>Nomasth |              | X            |                         |             |            |
|                                 | 26     |               |  |              |              |                         |             |            |
|                                 | 27     |               |  |              |              |                         |             |            |
| 10                              | 28     | Bedroom B     | 12" Self Stick tile<br>(State)                     |              | X            |                         |             |            |
|                                 | 29     |               |  |              |              |                         |             |            |
|                                 | 30     |               |  |              |              |                         |             |            |
| 11                              | 31     | Living Room B | Vinyl Sheet flooring<br>(Green Pebble)             | X            |              |                         |             |            |
|                                 | 32     |               |  |              |              |                         |             |            |
|                                 | 33     |               |  |              |              |                         |             |            |
| 12                              | 34     |               | Vinyl/mastic<br>(Black)                            |              | X            |                         |             |            |
|                                 | 35     |               |  |              |              |                         |             |            |
|                                 | 36     |               |  |              |              |                         |             |            |
| 13                              | 37     | Bedroom B     | 4" Floor Tile<br>(Brige)                           | X            |              |                         |             |            |
|                                 | 38     | Bedroom B     |  |              |              |                         |             |            |
|                                 | 39     | Bedroom A     |  |              |              |                         |             |            |
| 14                              | 40     | Bedroom B     | Tile mastic<br>(Black)                             |              | X            |                         |             |            |
|                                 | 41     | Bedroom B     |  |              |              |                         |             |            |
|                                 | 42     | Bedroom A     |  |              |              |                         |             |            |

**CONDITION Assessment Categories**

- (1) Thermal Systems Insulation - Good Condition
- (2) Thermal Systems Insulation - Damaged
- (3) Thermal Systems Insulation - Significantly Damaged
- (4) Surfacing - Good Condition
- (5) Surfacing - Damaged
- (6) Surfacing - Significantly Damaged

**Asbestos Project**

- (1) Amosite
- (2) Chrysotile
- (3) Crocidolite
- (4) Anthophyllite
- (5) Tremolite
- (6) Actinolite

**HAZARD Assessment Categories**

- G - Good Condition
- D - Damaged
- S - Significantly Damaged

LPD = Low Potential for Disturbance

Samples Collected by: Hunter Hanson  
 Samples Received by: John King

Date / Time: 9-18-18  
 Date / Time: 9/19/18 9:40am

180919C

**TES**  
 Trident Environmental Services, Inc.  
 Consultants in Industrial Hygiene and Safety  
 500 Dalbrook Lane, Suite E  
 Summerville, SC 29485  
 Phone (843) 873-3648  
 Fax (843) 871-1767

**CHAIN OF CUSTODY FORM**  
 Asbestos Bulk Samples

Project Name: 1240 Yeamans Hall Rd Date: 9-18-18  
 Location: Hanahan SC

| DESCRIPTION OF EACH SAMPLE AREA |           |               |                                   |             |             | ASSESSMENT OF MATERIALS |             |            |
|---------------------------------|-----------|---------------|-----------------------------------|-------------|-------------|-------------------------|-------------|------------|
| Rooming Area                    | Sample ID | Location      | Description                       | Friable (+) | Friable (-) | Asbestos Type           | COND Assess | HAZ Assess |
| 15                              | 43        | Bathroom A L2 | Vinyl Sheet Flooring (Yellow 89)  | X           |             |                         |             |            |
|                                 | 44        |               |                                   |             |             |                         |             |            |
|                                 | 45        |               |                                   |             |             |                         |             |            |
| 16                              | 46        | ↓             | Vinyl Mastix (Black)              |             | X           |                         |             |            |
|                                 | 47        |               |                                   |             |             |                         |             |            |
|                                 | 48        |               |                                   |             |             |                         |             |            |
| 17                              | 49        | Bathroom A L1 | Vinyl Sheet Flooring (Beige)      |             | X           |                         |             |            |
|                                 | 50        |               |                                   |             |             |                         |             |            |
|                                 | 51        |               |                                   |             |             |                         |             |            |
| 18                              | 52        | Kitchen L1    | Vinyl Sheet Flooring (Beige/Grey) |             | X           |                         |             |            |
|                                 | 53        |               |                                   |             |             |                         |             |            |
|                                 | 54        |               |                                   |             |             |                         |             |            |
| 19                              | 55        | Kitchen A     | Drywall                           | X           |             |                         | 7           |            |
|                                 | 56        |               |                                   |             |             |                         |             |            |
|                                 | 57        |               |                                   |             |             |                         |             |            |
| 20                              | 58        | Bedroom A     | Joint Compounding                 | X           |             |                         | 4           |            |
|                                 | 59        | Bedroom A     |                                   |             |             |                         |             |            |
|                                 | 60        | Kitchen B     |                                   |             |             |                         |             |            |
|                                 | 61        | Bedroom B     |                                   |             |             |                         |             |            |
|                                 | 62        | Bedroom B     |                                   |             |             |                         |             |            |

**CONDITION Assessment Categories**  
 (1) Thermal Systems Insulation - Good Condition  
 (2) Thermal Systems Insulation - Damaged  
 (3) Thermal Systems Insulation - Significantly Damaged  
 (4) Surfacing - Good Condition  
 (5) Surfacing - Damaged  
 (6) Surfacing - Significantly Damaged

**Asbestos Present**  
 (1) Amosite  
 (2) Chrysotile  
 (3) Crocidolite  
 (4) Anthophyllite  
 (5) Tremolite  
 (6) Actinolite

**HAZARD Assessment Categories**  
 G = Good Condition  
 D = Damaged  
 S = Significantly Damaged  
 LPD = Low Potential for Disturbance

Samples Collected by: Hunter Harris Date / Time: 9-18-18  
 Samples Received by: Armando Lopez Date / Time: 9/19/18 9:40am



# **COMPREHENSIVE ASBESTOS SURVEY**

**COMMERCIAL BUILDING  
1242 YEAMANS HALL ROAD  
HANAHAN, SC 29410**



*Prepared For:*

**CITY OF HANAHAN  
Attn: Mrs. Katherine Farias  
1255 Yeamans Hall Road  
Hanahan, SC 29410  
(843) 576-5254**

*Performed By:*

**TES**

**Trident Environmental Services, Inc.**

*Consultants in Industrial Hygiene and Safety*  
500 Oakbrook Lane, Suite E  
Summerville, SC 29485  
(843) 873-3648

**COMPREHENSIVE  
ASBESTOS SURVEY**

Commercial Building  
1242 Yeamans Hall Road  
Hanahan, SC 29410

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## EXECUTIVE SUMMARY

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 18, 2018 of the Commercial Building located at 1242 Yeamans Hall Road in Hanahan, South Carolina did reveal the presence of asbestos containing building materials. The following summary exhibits the asbestos containing building materials (ACBM) that were identified in the inspection.

### Asbestos

| Description               | Type                      |
|---------------------------|---------------------------|
| Transite Siding           | Category II – Non Friable |
| Sink Coating (black)      | Category I – Non Friable  |
| Ceiling Texture (texture) | RACM – Friable            |
| 9” Floor Tile (green)     | RACM – Friable            |
| Floor Tile Mastic (black) | Category I – Non Friable  |

RACM – Regulated Asbestos Containing Material

PACM – Presumed Asbestos Containing Material

The identified ACBM includes the item(s) listed above. All removal work of the identified ACBM should be performed by a properly trained and licensed abatement contractor prior to the planned renovation/demolition activities.

## BACKGROUND

Trident Environmental Services, Inc. was contracted by City of Hanahan. to perform a comprehensive asbestos survey of the Commercial Building located at 1242 Yeamans Hall Road in Hanahan, South Carolina. The survey was performed in order to satisfy the NESHAP requirements for renovation and/or demolition. The Commercial Building is approximately 1,113 square feet and is built slab on grade. Interior walls and ceilings are drywall with joint compound applied at the seams and patches. Flooring material is vinyl floor tile, vinyl sheet flooring, hardwood and carpet. Exterior walls are cementitious paneling with felt paper. Roofing material consists of asphalt roofing shingles and felt paper. Exterior windows and doors are wood.

### Asbestos

The inspection was conducted to identify ACBM which may be disturbed during the renovation/demolition activities. The identification of ACBM will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos fibers. Identification of ACBM also complies with Title 40 Code of the Federal Regulations, Part 61, and South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1, along with Title 29 Code of Federal Regulations, Part 1926 enforced by the Occupational Safety and Health Administration (OSHA). The Asbestos Survey describes the investigative procedures utilized, results of the suspect ACBM sampled/analyzed, and recommendations regarding the structures as related to asbestos.

## ASBESTOS SURVEY

### Asbestos Investigative Procedures

Trident Environmental Services, Inc. conducted an inspection for suspect ACM on September 18, 2018 of the Commercial Building located at 1242 Yeamans Hall Road in Hanahan, South Carolina. It is our understanding that the subject structure will undergo renovation or demolition activities in the near future. The asbestos survey was performed by observing and sampling suspect building materials. Significant destructive testing was not utilized during the inspection. There is a possibility that suspect materials exist in inaccessible areas such as wall cavities and pipe chases. If any additional suspect ACM are discovered during the course of demolition activities, bulk samples should be extracted to identify the presence, or absence, of asbestos prior to continuation of work activities.

A sampling strategy was developed to provide representative samples for analysis. Samples were then extracted from a variety of suspect ACM. Bulk samples collected were recorded on a Chain-of-Custody record and submitted to Trident Environmental Service Center, Inc. (TESC) a Polarized Light Microscopy (PLM) laboratory. The laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology (NIST). TESC is accredited by NVLAP for the analysis of bulk asbestos by PLM (NVLAP Lab Code: 200794-0).

The suspect materials were analyzed by trained microscopists utilizing PLM techniques coupled with dispersion staining in accordance with EPA Test Method Title 40 Code of Federal Regulations, Chapter I (1-1-87 edition), Part 763, Subpart F- Appendix A. This method identifies asbestos mineral fibers based on six optical characteristics: morphology, birefringence, refractive index, extinction angle, sign of elongation and dispersion staining colors. The laboratory analysis reports the specific type of asbestos identified (there are six asbestos minerals) and the percentage of asbestos present. The EPA and OSHA defines materials as asbestos containing if an asbestos content of greater than one percent (>1%) is detected in a representative sample.

Non-Friable Organically Bound (NOB) samples were submitted to AmeriSci Richmond Laboratory for analyses by Transmission Electron Microscopy (TEM). SCDHEC requires NOB materials with negative or trace results by PLM to be analyzed by at least one TEM. SCDHEC in accordance with ASTM E 2356-04 defines NOB materials as “materials that are not friable and that consist of fibers and other particulate matter embedded in a solid matrix of asphalt, vinyl or other organic substances.” Examples of NOB materials include but are not limited to flooring materials such as vinyl floor tiles, vinyl sheet flooring, adhesives, mastics, asphalt shingles, roofing materials, glazing, caulks, and cove base.

The EPA classifies ACBM into two categories, friable and non-friable. A friable material creates a greater health hazard due to the fact that it may be “crumbled, pulverized or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations.”

*Friable Asbestos* material means any material containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763 section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

*Category I Non Friable Asbestos-Containing Material (ACM)* means asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy.

*Category II Non Friable ACM* means any material, excluding Category I non friable ACM, containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. (cement siding, transite board shingles, etc.)

*Regulated Asbestos-Containing Material (RACM)* means (a) Friable asbestos material, (b) Category I non friable ACM that has become friable, (c) Category I non friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The following section summarizes the sample numbers, locations, type material, asbestos type, percent of asbestos detected, present condition of the asbestos containing material, potential for disturbance, and hazard assessment ratings. The asbestos sample laboratory analyses and chain of custody records are included at the end of this report.

### Asbestos Abbreviations and Hazard Assessment Key

The EPA and SCDHEC require that confirmed ACBM is given a hazard assessment based on its present condition and potential for future disturbance. This hazard assessment is used as a tool for prioritization in future remedial actions regarding the ACBM. The following key demonstrates the criteria that make up the hazard assessment.

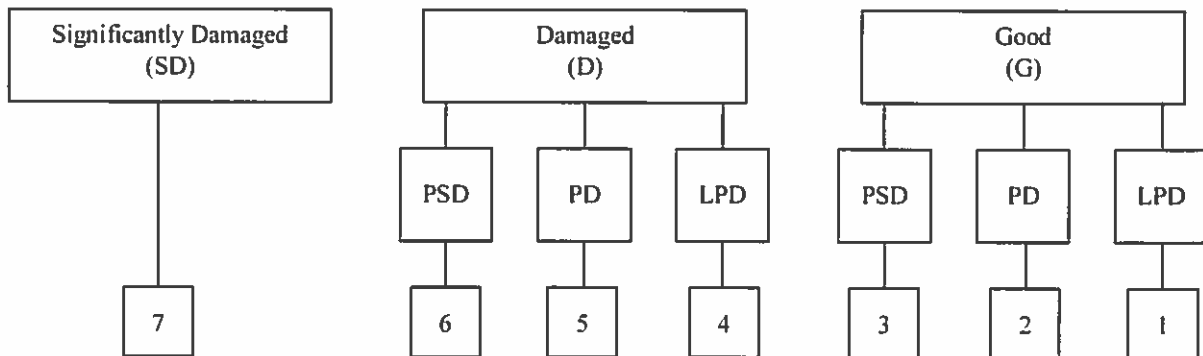
#### Present Condition

F = Friable                      G = Good (very localized limited damage)  
NF = Non-friable                D = Damaged (<10% distributed and/or <25% localized)  
S = Significantly Damaged ( $\geq$ 10% distributed and/or 25% localized)

#### Potential for Future Disturbance

LPD = Low Potential for Disturbance (Contact, Vibration, and/or Air Erosion – low concern)  
PD = Potential for Damage (Contact, Vibration, and/or Air Erosion – moderate concern)  
PSD = Potential for Significant Damage (Contact, Vibration and/or Air Erosion – high concern)

#### Hazard Assessment





**HOMOGENOUS AREA ESTIMATED FOOTAGE TABLE**  
**Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC**

| HOMOGENOUS AREA ID # | DESCRIPTION                                  | ESTIMATED AMOUNT |
|----------------------|--|------------------|
| <b>01</b>            | <b>Transite Siding</b>                       | <b>1,788 SF</b>  |
| 02                   | Siding Felt                                  | 1,788 SF         |
| 03                   | Window Glazing                               | 56 SF            |
| 04                   | Exterior Caulk                               | 90 SF            |
| 05                   | Roof Shingle                                 | 960 SF           |
| 06                   | Roof Felt                                    | 960 SF           |
| 07                   | Brick Mastic (black)                         | 8 SF             |
| <b>08</b>            | <b>Sink Coating (black)</b>                  | <b>4 SF</b>      |
| 09                   | Drywall                                      | 4,452 SF         |
| 10                   | Joint Compound                               | 4,452 SF         |
| <b>11</b>            | <b>Ceiling Texture (texture)</b>             | <b>170 SF</b>    |
| 12                   | Ceiling Texture (stapled)                    | 100 SF           |
| 13                   | Sink Coating (gray)                          | 4 SF             |
| 14                   | Vinyl Sheet Flooring (green/pink)            | 100 SF           |
| 15                   | Vinyl Sheet Flooring (green/dark green)      | 100 SF           |
| 16                   | Vinyl Sheet Flooring (12" slate squares)     | 100 SF           |
| 17                   | Vinyl Sheet Flooring (9" beige/white square) | 130 SF           |
| 18                   | Vinyl Sheet Flooring (beige/green)           | 120 SF           |
| <b>19</b>            | <b>9" Floor Tile (green)</b>                 | <b>140 SF</b>    |
| <b>20</b>            | <b>Floor Tile Mastic (black)</b>             | <b>140 SF</b>    |
| 20                   | Vinyl Sheet Flooring (light wood)            | 120 SF           |
| 21                   | Vinyl Sheet Flooring (stone)                 | 260 SF           |
| 22                   | Floor Felt Paper                             | 370 SF           |
| 23                   | Vinyl Sheet Flooring (dark wood)             | 210 SF           |
| 24                   | Vinyl Sheet Flooring (beige/green)           | 120 SF           |

**ASBESTOS SUMMARY**  
**Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC**

| DESCRIPTION               | TYPE                      | ESTIMATED AMOUNT |
|---------------------------|---------------------------|------------------|
| Transite Siding           | Category II – Non Friable | 1,788 SF         |
| Sink Coating (black)      | Category I – Non Friable  | 4 SF             |
| Ceiling Texture (texture) | RACM – Friable            | 170 SF           |
| 9” Floor Tile (green)     | RACM – Friable            | 140 SF           |
| Floor Tile Mastic (black) | Category I – Non Friable  | 140 SF           |

RACM – Regulated Asbestos Containing Material

\*PACM - Presumed Asbestos Containing Material

*SCDHEC requires any non-friable material that is identified in an asbestos inspection report in a condition other than good and non-friable must be handled as a Regulated Asbestos Containing Material (RACM) and identified as friable on the asbestos abatement application. This requirement is reflected in the Asbestos Summary Table listed above.*

Asbestos fibers were identified in the Transite Siding. Approximately 1,788 square feet is present and in good condition. This material is considered Category II – Non Friable Asbestos and is located on the exterior.

Asbestos fibers were identified in the Sink Coating (black). Approximately 4 square feet is present and in good condition. This material is considered Category I – Non Friable Asbestos and is located in the Unit A Kitchen.

Asbestos fibers were identified in the Ceiling Texture (texture). Approximately 170 square feet is present and is good condition. This material is considered RACM – Friable Asbestos and is located in the Unit B Living Room.

Asbestos fibers were identified in the 9” Floor Tile (beige) and associated Floor Tile Mastic (black). Approximately 140 square feet is present and is significantly damaged. This material is considered RACM – Friable Asbestos and is located in Room 2 (layer 2) and Room 1 Closet (layer 2). **Note: Floor Tile may be located under non-load bearing walls and cabinets.**

**The estimated quantities provided should be verified by contractor and/or building owner. Any discrepancies are to be addressed prior to removal of ACM. Please note that removal costs vary depending on the contractor, the quantity/condition of the ACM, and the accessibility/location of the ACM.**

**ASBESTOS SAMPLE DATA TABLE**  
Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |                      |                 |               | LABORATORY       |          | ASSESSMENT OF MATERIALS       |                            |
|---------------------------------|----------------------|-----------------|---------------|------------------|----------|-------------------------------|----------------------------|
| Homogeneous Area & Sample ID    | Description          | Location/Room # | Friable (Y/N) | Asbestos Present |          | Condition Assessment Category | Hazard Assessment Category |
|                                 |                      |                 |               | Percent          | Asbestos |                               |                            |
| 01-01                           | Transite Siding      | Exterior Siding | N             | 10.0%            | CHRY     | 7                             | 3                          |
| 01-02                           | Transite Siding      | Exterior Siding | N             | NT               | PACM     | 7                             | 3                          |
| 01-03                           | Transite Siding      | Exterior Siding | N             | NT               | PACM     | 7                             | 3                          |
| 02-04                           | Siding Felt          | Exterior Siding | N             | 0.0%             | ND       | 7                             | N/A                        |
| 02-05                           | Siding Felt          | Exterior Siding | N             | 0.0%             | ND       | 7                             | N/A                        |
| 02-06 T                         | Siding Felt          | Exterior Siding | N             | 0.0%             | ND       | 7                             | N/A                        |
| 03-07                           | Window Glazing       | Window 1        | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 03-08                           | Window Glazing       | Window 2        | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 03-09 T                         | Window Glazing       | Window 3        | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 04-10                           | Exterior Caulk       | Window          | N             | 0.0%             | ND       | 7                             | N/A                        |
| 04-11                           | Exterior Caulk       | Door            | N             | 0.0%             | ND       | 7                             | N/A                        |
| 04-12 T                         | Exterior Caulk       | Door            | N             | 0.0%             | ND       | 7                             | N/A                        |
| 05-13                           | Roof Shingle         | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 05-14                           | Roof Shingle         | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 05-15 T                         | Roof Shingle         | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 06-16                           | Roof Felt            | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 06-17                           | Roof Felt            | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 06-18 T                         | Roof Felt            | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 07-19                           | Brick Mastic (black) | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 07-20                           | Brick Mastic (black) | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 07-21 T                         | Brick Mastic (black) | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 08-22                           | Sink Coating (black) | Kitchen A       | N             | 3.0%             | CHRY     | 7                             | 1                          |
| 08-23                           | Sink Coating (black) | Kitchen A       | N             | NT               | PACM     | 7                             | 1                          |
| 08-24                           | Sink Coating (black) | Kitchen A       | N             | NT               | PACM     | 7                             | 1                          |
| 09-25                           | Drywall              | Kitchen A       | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 09-26                           | Drywall              | Kitchen A       | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 09-27                           | Drywall              | Kitchen A       | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 10-28                           | Joint Compound       | Kitchen A       | Y             | 0.0%             | ND       | 4                             | N/A                        |
| 10-29                           | Joint Compound       | Living Room A   | Y             | 0.0%             | ND       | 4                             | N/A                        |

**Assessment Categories**

- (1) Thermal Systems Insulation – Good Condition
- (2) Thermal Systems Insulation – Damaged
- (3) Thermal Systems Insulation – Significantly Damaged
- (4) Surfacing – Good Condition

- (5) Surfacing – Damaged
- (6) Surfacing – Significantly Damaged
- (7) Miscellaneous – Good Condition
- (8) Miscellaneous – Damaged
- (9) Miscellaneous – Significantly Damaged

**Asbestos Present**

- AMOS – Amosite
- CHRY – Chrysotile
- CROC – Crocidolite
- ANTH – Anthophyllite
- TREM – Tremolite
- ACTI – Actinolite
- ND – None Detected
- NT – Not Tested
- PACM – Presumed ACM
- Asbestos Detected**

## ASBESTOS SAMPLE DATA TABLE

### Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |  |                   |               | LABORATORY       |          | ASSESSMENT OF MATERIALS       |                            |
|---------------------------------|--|-------------------|---------------|------------------|----------|-------------------------------|----------------------------|
| Homogeneous Area & Sample ID    | Description                                  | Location/Room #   | Friable (Y/N) | Asbestos Present |          | Condition Assessment Category | Hazard Assessment Category |
|                                 |  |                   |               | Percent          | Asbestos |                               |                            |
| 10-30                           | Joint Compound                               | Room 1            | Y             | 0.0%             | ND       | 4                             | N/A                        |
| 10-31                           | Joint Compound                               | Room 3            | Y             | 0.0%             | ND       | 4                             | N/A                        |
| 10-32                           | Joint Compound                               | Living Room B     | Y             | 0.0%             | ND       | 4                             | N/A                        |
| 11-33                           | Ceiling Texture (texture)                    | Living Room B     | Y             | 3.0%             | CHRY     | 4                             | 3                          |
| 11-34                           | Ceiling Texture (texture)                    | Living Room B     | Y             | NT               | PACM     | 4                             | 3                          |
| 11-35                           | Ceiling Texture (texture)                    | Living Room B     | Y             | NT               | PACM     | 4                             | 3                          |
| 12-36                           | Ceiling Texture (stapled)                    | Kitchen A         | Y             | 0.0%             | ND       | 4                             | N/A                        |
| 12-37                           | Ceiling Texture (stapled)                    | Kitchen A         | Y             | 0.0%             | ND       | 4                             | N/A                        |
| 12-38                           | Ceiling Texture (stapled)                    | Kitchen A         | Y             | 0.0%             | ND       | 4                             | N/A                        |
| 13-39                           | Sink Coating (gray)                          | Kitchen B         | N             | 0.0%             | ND       | 7                             | N/A                        |
| 13-40                           | Sink Coating (gray)                          | Kitchen B         | N             | 0.0%             | ND       | 7                             | N/A                        |
| 13-41 T                         | Sink Coating (gray)                          | Kitchen B         | N             | 0.0%             | ND       | 7                             | N/A                        |
| 14-42                           | Vinyl Sheet Flooring (green/pink)            | Kitchen A Layer 3 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 14-43                           | Vinyl Sheet Flooring (green/pink)            | Kitchen A Layer 3 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 14-44 T                         | Vinyl Sheet Flooring (green/pink)            | Kitchen A Layer 3 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 15-45                           | Vinyl Sheet Flooring (green/dark green)      | Kitchen A Layer 2 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 15-46                           | Vinyl Sheet Flooring (green/dark green)      | Kitchen A Layer 2 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 15-47 T                         | Vinyl Sheet Flooring (green/dark green)      | Kitchen A Layer 2 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 16-48                           | Vinyl Sheet Flooring (12" slate square)      | Kitchen A Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 16-49                           | Vinyl Sheet Flooring (12" slate square)      | Kitchen A Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 16-50 T                         | Vinyl Sheet Flooring (12" slate square)      | Kitchen A Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 17-51                           | Vinyl Sheet Flooring (9" beige/white square) | Room 1 – Layer 1  | N             | 0.0%             | ND       | 7                             | N/A                        |
| 17-52                           | Vinyl Sheet Flooring (9" beige/white square) | Room 1 – Layer 1  | N             | 0.0%             | ND       | 7                             | N/A                        |
| 17-53 T                         | Vinyl Sheet Flooring (9" beige/white square) | Room 1 – Layer 1  | N             | 0.0%             | ND       | 7                             | N/A                        |

**Assessment Categories**

- |  |   |
|--|---|
| (1) Thermal Systems Insulation – Good Condition        | (5) Surfacing – Damaged                   |
| (2) Thermal Systems Insulation – Damaged               | (6) Surfacing – Significantly Damaged     |
| (3) Thermal Systems Insulation – Significantly Damaged | (7) Miscellaneous – Good Condition        |
| (4) Surfacing – Good Condition                         | (8) Miscellaneous – Damaged               |
|  | (9) Miscellaneous – Significantly Damaged |

**Asbestos Present**

- |                      |                          |
|----------------------|--------------------------|
| AMOS – Amosite       | ACTI – Actinolite        |
| CHRY – Chrysotile    | ND – None Detected       |
| CROC – Crocidolite   | NT – Not Tested          |
| ANTH – Anthophyllite | PACM – Presumed ACM      |
| TREM – Tremolite     | <b>Asbestos Detected</b> |

## ASBESTOS SAMPLE DATA TABLE

### Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |                                    |                  |               | LABORATORY       |          | ASSESSMENT OF MATERIALS       |                            |
|---------------------------------|------------------------------------|------------------|---------------|------------------|----------|-------------------------------|----------------------------|
| Homogeneous Area & Sample ID    | Description                        | Location/Room #  | Friable (Y/N) | Asbestos Present |          | Condition Assessment Category | Hazard Assessment Category |
|                                 |                                    |                  |               | Percent          | Asbestos |                               |                            |
| 18-54                           | Vinyl Sheet Flooring (beige/green) | Room 2 – Layer 3 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 18-55                           | Vinyl Sheet Flooring (beige/green) | Room 2 – Layer 3 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 18-56 T                         | Vinyl Sheet Flooring (beige/green) | Room 2 – Layer 3 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 19-57                           | 9" Floor Tile (green)              | Room 2 – Layer 2 | Y             | 3.0%             | CHRY     | 9                             | 1                          |
| 19-58                           | 9" Floor Tile (green)              | Room 2 – Layer 2 | Y             | NT               | PACM     | 9                             | 1                          |
| 19-59                           | 9" Floor Tile (green)              | Closet – Layer 2 | Y             | NT               | PACM     | 9                             | 1                          |
| 20-60                           | Floor Tile Mastic (black)          | Room 2 – Layer 2 | N             | 8.0%             | CHRY     | 7                             | 1                          |
| 20-61                           | Floor Tile Mastic (black)          | Room 2 – Layer 2 | N             | NT               | PACM     | 7                             | 1                          |
| 20-62                           | Floor Tile Mastic (black)          | Closet – Layer 2 | N             | NT               | PACM     | 7                             | 1                          |
| 20-63                           | Vinyl Sheet Flooring (light wood)  | Room 2 – Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 20-64                           | Vinyl Sheet Flooring (light wood)  | Room 2 – Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 20-65 T                         | Vinyl Sheet Flooring (light wood)  | Room 2 – Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 21-66                           | Vinyl Sheet Flooring (stone)       | Living Room B    | N             | 0.0%             | ND       | 7                             | N/A                        |
| 21-67                           | Vinyl Sheet Flooring (stone)       | Living Room B    | N             | 0.0%             | ND       | 7                             | N/A                        |
| 21-68 T                         | Vinyl Sheet Flooring (stone)       | Kitchen B        | N             | 0.0%             | ND       | 7                             | N/A                        |
| 22-69                           | Floor Felt Paper                   | Living Room B    | N             | 0.0%             | ND       | 7                             | N/A                        |
| 22-70                           | Floor Felt Paper                   | Room 3           | N             | 0.0%             | ND       | 7                             | N/A                        |
| 22-71 T                         | Floor Felt Paper                   | Room 4           | N             | 0.0%             | ND       | 7                             | N/A                        |
| 23-72                           | Vinyl Sheet Flooring (dark wood)   | Room 3 – Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 23-73                           | Vinyl Sheet Flooring (dark wood)   | Room 3 – Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 23-74 T                         | Vinyl Sheet Flooring (dark wood)   | Room 3 – Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 24-75                           | 12" Self-Stick Tile (beige stone)  | Room 4 – Layer 2 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 24-76                           | 12" Self-Stick Tile (beige stone)  | Room 4 – Layer 2 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 24-77 T                         | 12" Self-Stick Tile (beige stone)  | Room 4 – Layer 2 | N             | 0.0%             | ND       | 7                             | N/A                        |

**Assessment Categories**

- |  |   |
|--|---|
| (1) Thermal Systems Insulation – Good Condition        | (5) Surfacing – Damaged                   |
| (2) Thermal Systems Insulation – Damaged               | (6) Surfacing – Significantly Damaged     |
| (3) Thermal Systems Insulation – Significantly Damaged | (7) Miscellaneous – Good Condition        |
| (4) Surfacing – Good Condition                         | (8) Miscellaneous – Damaged               |
|  | (9) Miscellaneous – Significantly Damaged |

**Asbestos Present**

- |                      |                          |
|----------------------|--------------------------|
| AMOS – Amosite       | ACTI – Actinolite        |
| CHRY – Chrysotile    | ND – None Detected       |
| CROC – Crocidolite   | NT – Not Tested          |
| ANTH – Anthophyllite | PACM – Presumed ACM      |
| TREM – Tremolite     | <b>Asbestos Detected</b> |

## CONCLUSIONS/RECOMMENDATIONS

### Asbestos Inspection

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 18, 2018 of the Commercial Building located at 1242 Yeamans Hall Road in Hanahan, South Carolina did reveal the presence of ACBM. Renovation or demolition activities that will disturb the ACBM will require removal per state and federal regulations. Asbestos materials can become hazardous when, due to damage, disturbance, or deterioration over time, they release asbestos fibers into the air of the building. All areas that contain asbestos should be utilized in a controlled manner to reduce the potential for disturbance. OSHA requires notification to all trades/contractors about the condition of the ACBM to prevent possible occupational exposures.

Demolition activities in public and commercial buildings are regulated by OSHA, EPA, and SCDHEC. Code 40 of Federal Regulations Part 61, Subpart M, Final Rule, "National Emissions Standards for Hazardous Air Pollutants" (NESHAP), and SCDHEC Regulation 61-86.1 require the proper removal and disposal of ACBM that is affected by renovation or demolition. Demolition of the subject structures will require written notification, proper transportation, and disposal per state and federal regulations.



**PHOTOGRAPHS**

**Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC**



**HOMOGENEOUS AREA 01  
TRANSITE SIDING**



**HOMOGENEOUS AREA 02  
SIDING FELT**



**HOMOGENEOUS AREA 03  
WINDOW GLAZING**



**HOMOGENEOUS AREA 04  
EXTERIOR CAULK**



**HOMOGENEOUS AREA 05  
ROOF SHINGLE**



**HOMOGENEOUS AREA 06  
ROOF FELT**



**PHOTOGRAPHS**

**Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC**



**HOMOGENEOUS AREA 07  
BRICK MASTIC (BLACK)**



**HOMOGENEOUS AREA 08  
SINK COATING (BLACK)**



**HOMOGENEOUS AREA 09  
DRYWALL**



**HOMOGENEOUS AREA 10  
JOINT COMPOUND**



**HOMOGENEOUS AREA 11  
CEILING TEXTURE (TEXTURE)**



**HOMOGENEOUS AREA 12  
CEILING TEXTURE (STAPLED)**

**PHOTOGRAPHS**

**Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC**



**HOMOGENEOUS AREA 13  
SINK COATING (GRAY)**



**HOMOGENEOUS AREA 14  
VINYL SHEET FLOORING (GREEN/PINK)**



**HOMOGENEOUS AREA 15  
VINYL SHEET FLOORING  
(GREEN/DARK GREEN)**



**HOMOGENEOUS AREA 16  
VINYL SHEET FLOORING  
(12" SLATE SQUARES)**



**HOMOGENEOUS AREA 17  
VINYL SHEET FLOORING  
(9" BEIGE/WHITE SQUARES)**



**HOMOGENEOUS AREA 18  
VINYL SHEET FLOORING  
(BEIGE/GREEN)**

**PHOTOGRAPHS**

**Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC**



**HOMOGENEOUS AREAS 19, 20  
9" FLOOR TILE (GREEN)  
MASTIC (BLACK)**



**HOMOGENEOUS AREA 20  
VINYL SHEET FLOORING (LIGHT WOOD)**



**HOMOGENEOUS AREA 21  
VINYL SHEET FLOORING  
(STONE)**



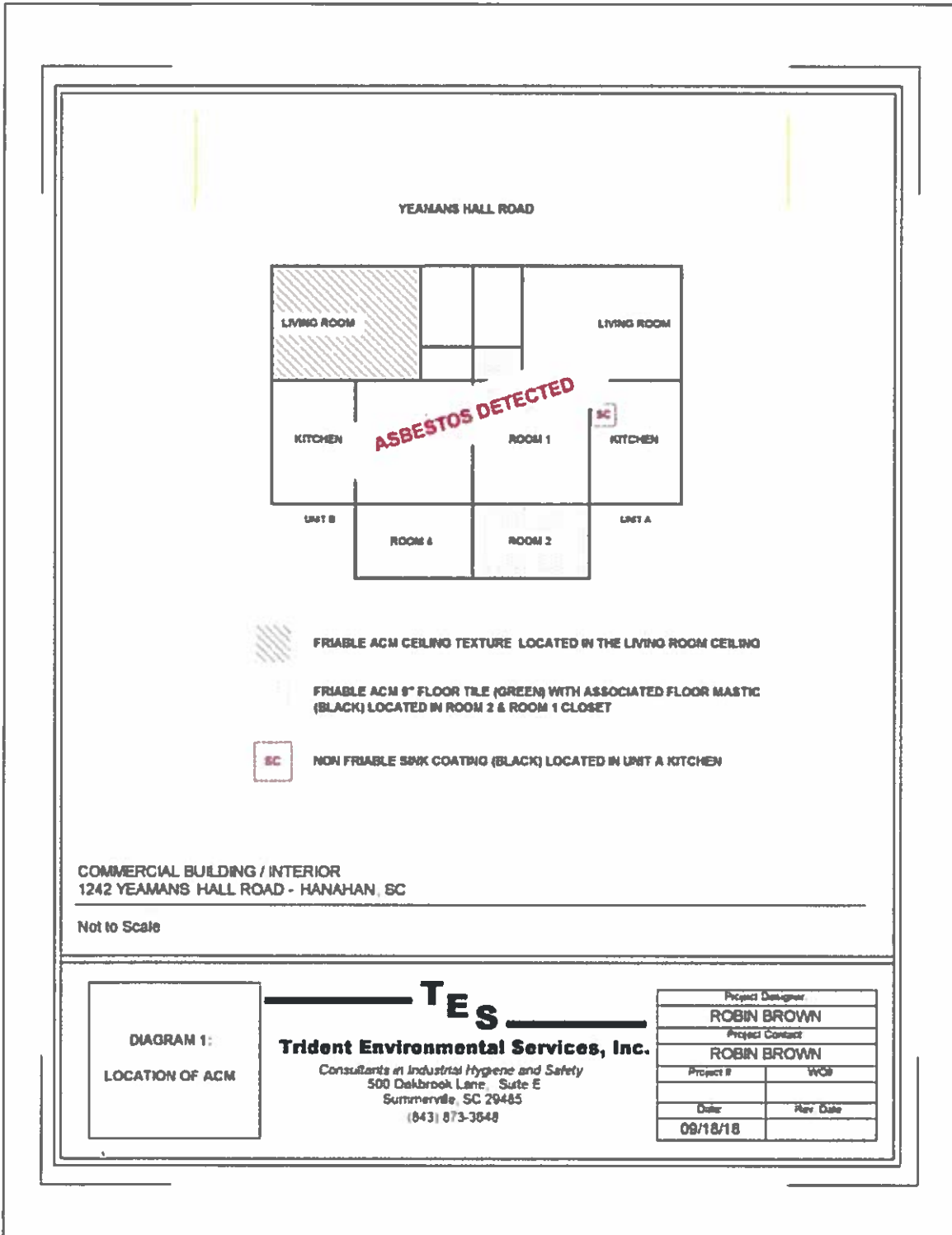
**HOMOGENEOUS AREA 22  
FLOOR FELT PAPER**



**HOMOGENEOUS AREA 23  
VINYL SHEET FLOORING  
(DARK WOOD)**



**HOMOGENEOUS AREA 24  
12" SELF-STICK TILE  
(BEIGE STONE)**



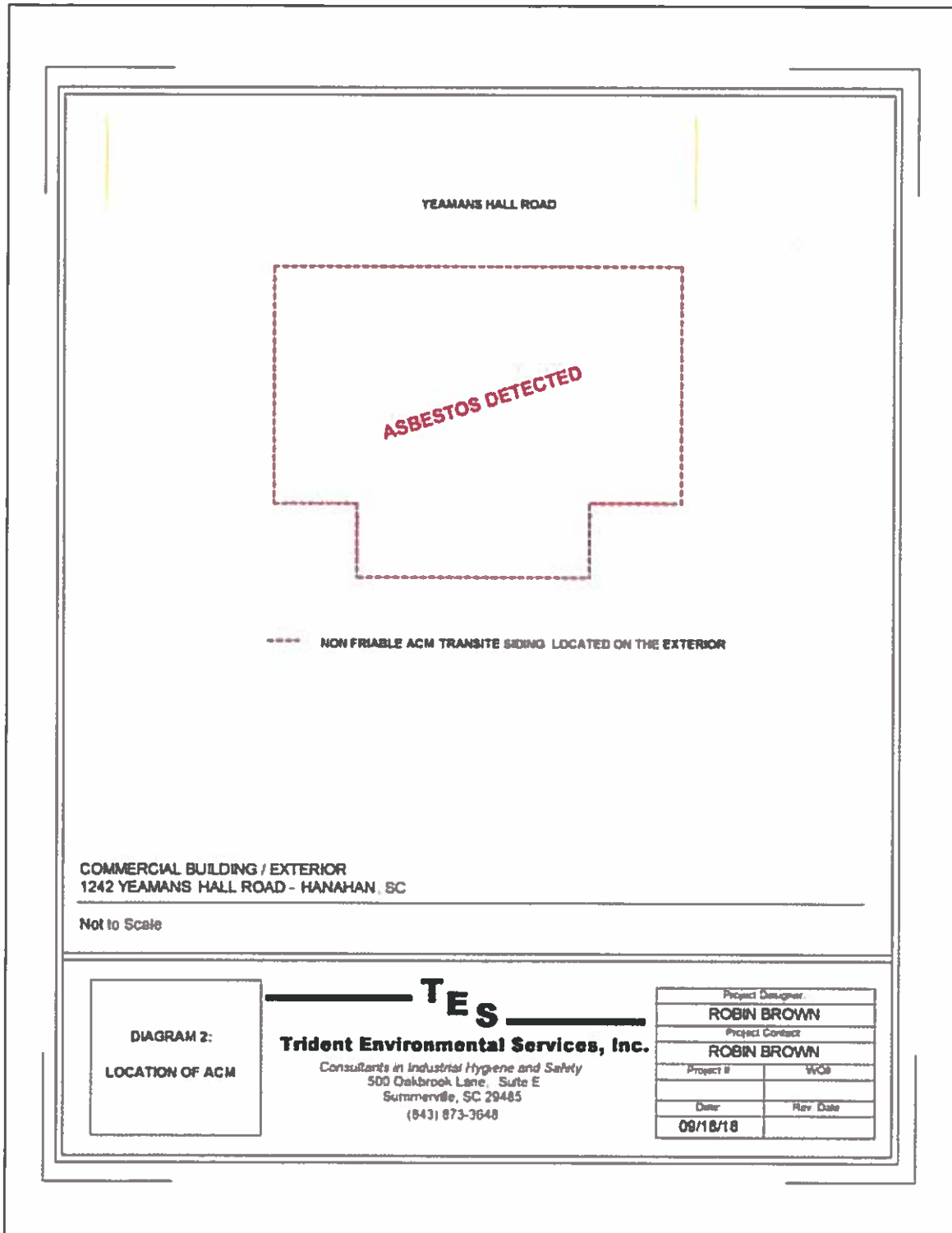


DIAGRAM 2:  
 LOCATION OF ACM

**TES**  
**Trident Environmental Services, Inc.**  
 Consultants in Industrial Hygiene and Safety  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485  
 (843) 873-3648

|                  |          |
|------------------|----------|
| Project Designer |          |
| ROBIN BROWN      |          |
| Project Contact  |          |
| ROBIN BROWN      |          |
| Project #        | W08      |
| Date             | Rev Date |
| 09/18/18         |          |



**COMPREHENSIVE  
ASBESTOS SURVEY**

Inspection Date: 09/18/2018

Preparation Date: 09/26/2018

Inspected & Prepared By:

*Hunter Hanson*

Hunter Hanson  
S.C. Inspector License BI – 01468

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**SCDHEC ISSUED**  
Asbestos ID Card

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**Hunter Hanson**



|            |          |                  |
|------------|----------|------------------|
| CONSULTBI  | BI-01468 | Expiration Date: |
| AIRSAMPLER | AS-00413 | 10/28/18         |
|            |          | 01/06/19         |

Reviewed By:

*Robin A. Brown*

Robin A. Brown  
S.C. Inspector License BI – 00613

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**SCDHEC ISSUED**  
Asbestos ID Card

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**Robin Brown**



|            |          |                  |
|------------|----------|------------------|
| CONSULTPD  | PD-00176 | Expiration Date: |
| CONSULTBI  | BI-00613 | 06/14/19         |
| AIRSAMPLER | AS-00178 | 06/26/19         |
|            |          | 02/05/19         |

United States Department of Commerce  
National Institute of Standards and Technology



**Certificate of Accreditation to ISO/IEC 17025:2005**

NVLAP LAB CODE: 200794-0

**Triangle Environmental Service Center, Inc.**  
Midlothian, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:

**Asbestos Fiber Analysis**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-IAC-IAF Communique dated January 2008).



*John S. Lamm*  
For the National Voluntary Laboratory Accreditation Program

2018-04-01 through 2019-03-31

Effective Dates





SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Triangle Environmental Service Center, Inc.

13509 East Boundary Road, Suite B

Midlothian, VA 23112

Mr. Feng Jiang

Phone: 804-739-1751 Fax: 804-739-1753

Email: [info@tesclab.com](mailto:info@tesclab.com)

<http://www.tesclab.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200794-0

Bulk Asbestos Analysis

| <u>Code</u> | <u>Description</u>   |
|-------------|--|
| 18/A01      | EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples |
| 18/A03      | EPA 600/R-93/116, Method for the Determination of Asbestos in Bulk Building Materials  |

For the National Voluntary Laboratory Accreditation Program

United States Department of Commerce  
National Institute of Standards and Technology



## Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101904-0

**AmeriSci Richmond**  
Midlothian, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:

### Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2018-07-01 through 2019-06-30

Effective Dates



*[Signature]*  
For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

AmeriSci Richmond  
dba AmeriSci Richmond  
13635 Genito Road  
Midlothian, VA 23112  
Mr. Thomas B. Keith  
Phone: 804-763-1200 Fax: 804-763-1800  
Email: [bkeith@amerisci.com](mailto:bkeith@amerisci.com)  
<http://www.amerisci.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101904-0

Bulk Asbestos Analysis

| <u>Code</u> | <u>Description</u>   |
|-------------|--|
| 18/A01      | EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples |
| 18/A03      | EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials  |

Airborne Asbestos Analysis

| <u>Code</u> | <u>Description</u>   |
|-------------|--|
| 18/A02      | U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A. |

For the National Voluntary Laboratory Accreditation Program

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

12509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180919D

DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/19/2018  
 DATE OF REPORT: 09/19/2018

CLIENT JOB/ #:

JOB SITE: 1242 Yeamans Hall Rd.

ANALYST: B. Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 1             | 01-01 / Gray granular, white fibers  | 10% Chrysotile       |                       | 91%                     |
| 2             | 01-02 /                              | Positive Stop        |                       | 100%                    |
| 3             | 01-03 /                              | Positive Stop        |                       | 100%                    |
| 4             | 02-04 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 5             | 02-05 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 6             | 02-06 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 7             | 03-07 / White powder                 | NAD                  |                       | 100%                    |
| 8             | 03-08 / White powder                 | NAD                  |                       | 100%                    |
| 9             | 03-09 /                              | Not Analyzed         |                       | 100%                    |
| 10            | 04-10 / Tan, white powder            | NAD                  |                       | 100%                    |

Samples are analyzed in accordance with "Ingram Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M-82-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected - not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 210794-0

[LEGEND: NAD=No Asbestos Detected, I mo =1 molecule, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Yunhong Fang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180919D

DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/19/2018  
 DATE OF REPORT: 09/19/2018

CLIENT JOB/ #:

JOB SITE: 1242 Yeamans Hall Rd.

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 11            | 04-11 / White adhesive               | NAD                  |                       | 100%                    |
| 12            | 04-12 /                              | Not Analyzed         |                       | 100%                    |
| 13            | 05-13 / Black tar-like               | NAD                  | 10% Fiberglass        | 90%                     |
| 14            | 05-14 / Black tar-like               | NAD                  | 10% Fiberglass        | 90%                     |
| 15            | 05-15 /                              | Not Analyzed         |                       | 100%                    |
| 16            | 06-16 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 17            | 06-17 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 18            | 06-18 /                              | Not Analyzed         |                       | 100%                    |
| 19            | 07-19 / Black adhesive               | NAD                  |                       | 100%                    |
| 20            | 07-20 / Black adhesive               | NAD                  |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M-93-029, Dec 1992), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 210794-0

(LEGEND: NAD=No Asbestos Detected, I.mn =I molecule, JC=Joint Compound)

Reviewed By Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Luobang Jiang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Midlothian, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180919D

DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/19/2018  
 DATE OF REPORT: 09/19/2018

CLIENT JOB #:

JOB SITE: 1242 Yeamans Hall Rd.

ANALYST: B. Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 21            | 07-21 /                              | Not Analyzed         |                       | 100%                    |
| 22            | 08-22 / Black adhesive               | 3% Chrysotile        |                       | 97%                     |
| 23            | 08-23 /                              | Positive Stop        |                       | 100%                    |
| 24            | 08-24 /                              | Positive Stop        |                       | 100%                    |
| 25            | 09-25 / White powder, brown fibers   | NAD                  | 20% Cellulose         | 80%                     |
| 26            | 09-26 / White powder, brown fibers   | NAD                  | 20% Cellulose         | 80%                     |
| 27            | 09-27 / White powder, brown fibers   | NAD                  | 20% Cellulose         | 80%                     |
| 28            | 10-28 / White powder                 | NAD                  |                       | 100%                    |
| 29            | 10-29 / White powder                 | NAD                  |                       | 100%                    |
| 30            | 10-30 / White powder                 | NAD                  |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M-93-020 Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected - not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. (This test report relates only to the item(s) tested)

NVIAP Lab Code: 210794-0

(LEGEND: NAD=No Asbestos Detected, I.mo =I molecule, JC=Joint Compound)

Reviewed By: Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Jianlong Jiang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180919D

DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/19/2018  
 DATE OF REPORT: 09/19/2018

CLIENT JOB/ #:

JOB SITE: 1242 Yeamans Hall Rd.

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 11            | 10-11 / White powder                 | NAD                  |                       | 100%                    |
| 12            | 10-32 / White powder                 | NAD                  |                       | 100%                    |
| 13            | 11-33 / White powder                 | 3% Chrysotile        |                       | 97%                     |
| 34            | 11-34 /                              | Positive Stop        |                       | 100%                    |
| 35            | 11-35 /                              | Positive Stop        |                       | 100%                    |
| 36            | 12-36 / White powder                 | NAD                  |                       | 100%                    |
| 17            | 12-37 / White powder                 | NAD                  |                       | 100%                    |
| 38            | 12-38 / White powder                 | NAD                  |                       | 100%                    |
| 39            | 13-39 / Gray adhesive                | NAD                  |                       | 100%                    |
| 40            | 13-40 / Gray adhesive                | NAD                  |                       | 100%                    |
| 41            | 13-41 /                              | Not Analyzed         |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M4-82-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVIAP Lab Code: 21079440

[LEGEND: NAD=No Asbestos Detected, I mo =1 molecule, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jung, MS, Senior Geologist, Laboratory Director  
 Jueckung Feng, Senior Geologist



**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Midlothian, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 3411 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180919D

DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/19/2018  
 DATE OF REPORT: 09/19/2018

CLIENT JOB #:

JOB SITE: 1242 Yeamans Hall Rd.

ANALYST: B. Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 42            | 14-42 / Green lino, black fibers     | NAD                  | 20% Cellulose         | 80%                     |
| 43            | 14-43 / Green lino, black fibers     | NAD                  | 20% Cellulose         | 80%                     |
| 44            | 14-44 /                              | Not Analyzed         |                       | 100%                    |
| 45            | 15-45 / Green lino, black fibers     | NAD                  | 20% Cellulose         | 80%                     |
| 46            | 15-46 / Green lino, black fibers     | NAD                  | 20% Cellulose         | 80%                     |
| 47            | 15-47 /                              | Not Analyzed         |                       | 100%                    |
| 48            | 16-48 / Brown linoleum               | NAD                  | 5% Fiberglass         | 95%                     |
| 49            | 16-49 / Brown linoleum               | NAD                  | 5% Fiberglass         | 95%                     |
| 50            | 16-50 /                              | Not Analyzed         |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M-92-020 Dec 1992), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 210794-0

(LEGEND: NAD=No Asbestos Detected, I mo =I molecule, JC=Joint Compound)

Reviewed By Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Luohong Fang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180919D

DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/19/2018  
 DATE OF REPORT: 09/19/2018

CLIENT JOB #:

JOB SITE: 1242 Yeamans Hall Rd.

ANALYST: D. Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 51            | 17-51 / Brown lino . white fibers    | NAD                  | 20% Cellulose         | 80%                     |
| 52            | 17-52 / Brown lino . white fibers    | NAD                  | 20% Cellulose         | 80%                     |
| 53            | 17-53 /                              | Not Analyzed         |                       | 100%                    |
| 54            | 18-54 / Brown lino . black fibers    | NAD                  | 20% Cellulose         | 80%                     |
| 55            | 18-55 / Brown lino . black fibers    | NAD                  | 20% Cellulose         | 80%                     |
| 56            | 18-56 /                              | Not Analyzed         |                       | 100%                    |
| 57            | 19-57 / Green vinyl                  | 3% Chrysotile        |                       | 97%                     |
| 58            | 19-58 /                              | Positive Stop        |                       | 100%                    |
| 59            | 19-59 /                              | Positive Stop        |                       | 100%                    |
| 60            | 20-60 / Black adhesive               | 8% Chrysotile        |                       | 92%                     |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/R-93-116 Dec 1992), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the items tested.

NV1.AP1 Lab Code: 210794-01

(LEGEND: NAD=No Asbestos Detected, I.mn=I.molecule, JC=Joint Compound)

Reviewed By: Authorized Signatory:



Fung Jung, MS, Senior Geologist, Laboratory Director  
 Yunchung Jung, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180919D

DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/19/2018  
 DATE OF REPORT: 09/19/2018

CLIENT JOB/ #:

JOB SITE: 1242 Yeamans Hall Rd.

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 61            | 20-61 /                              | Positive Stop        |                       | 100%                    |
| 62            | 20-62 /                              | Positive Stop        |                       | 100%                    |
| 63            | 20-63 / Brown linoleum               | NAD                  | 5% Fiberglass         | 95%                     |
| 64            | 20-64 / Brown linoleum               | NAD                  | 5% Fiberglass         | 95%                     |
| 65            | 20-65 /                              | Not Analyzed         |                       | 100%                    |
| 66            | 21-66 / Brown linoleum               | NAD                  |                       | 100%                    |
| 67            | 21-67 / Brown linoleum               | NAD                  |                       | 100%                    |
| 68            | 21-68 /                              | Not Analyzed         |                       | 100%                    |
| 69            | 22-69 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 70            | 22-70 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M4-82-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 210794-0

[LEGEND: NAD=No Asbestos Detected, I=Insulation, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Jianqiang Jiang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 300 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180919D

DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/19/2018  
 DATE OF REPORT: 09/19/2018

CLIENT JOB #:

JOB SITE: 1242 Yeamans Hall Rd.

ANALYST: B THRENDER

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 71            | 22-71 /                              | Not Analyzed         |                       | 100%                    |
| 72            | 23-72 / Brown linoleum               | NAD                  |                       | 100%                    |
| 73            | 23-73 / Brown linoleum               | NAD                  |                       | 100%                    |
| 74            | 23-74 /                              | Not Analyzed         |                       | 100%                    |
| 75            | 24-75 / Gray vinyl                   | NAD                  |                       | 100%                    |
| 76            | 24-76 / Gray vinyl                   | NAD                  |                       | 100%                    |
| 77            | 24-77 /                              | Not Analyzed         |                       | 100%                    |

Total Samples/Layers Analyzed: 51

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M-92-020, Dec 1992), or the current US EPA method for the analysis of asbestos in building material. None detected: not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVI-AP Lab Code: 210794-0

[LEGEND: NAD=No Asbestos Detected, I mo =I moleum, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director  
 Juechung Jiang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

12509 East Broadway Road, Suite B, Middletown, VA 23112 • 804-779-1751 • Fax: 804-779-1750

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # INP1914  
 DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/21/2018  
 DATE OF REPORT: 09/21/2018  
 ANALYST: B. Gjoka

CLIENT PROJECT #  
 JOBSITE: 1242 Yeamans Hall Rd.  
 TAT: 1 Day

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
| 1             | 03-00           | 0.465             | 7.1                      | 86.8                     | 0                                  | NAD              |
| 2             | 05-15           | 0.463             | 18.1                     | 40.6                     | 41.3                               | NAD              |
| 3             | 06-18           | 0.1013            | 93.1                     | 2.7                      | 4.2                                | NAD              |
| 4             | 07-21           | 0.205             | 90                       | 7                        | 3                                  | NAD              |
| 5             | 13-41           | 0.243             | 18.9                     | 37                       | 44.1                               | NAD              |

Reviewed By Authorized Signatory:

*Grudoy Tang*

Feng Jiang, M.S. Senior Geologist, Laboratory Director  
 Feng Tang, M.S. Senior Geologist

This report must not be reproduced except in full with the approval of TESC, Inc. The test report relates only to the item(s) tested. This test was performed by an NVLAP accredited ILM Lab. NVLAP Lab ID # 10194240. ILM analysis by EPA 600/R-93/116 (not covered by NVLAP). Full accreditation (ELEMENT): NAD - No Asbestos Detected; NA - Not Analyzed; PS - Positive Slip; Tive - 1%, RVA - No Visual Asbestos

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middleburg, VA 23112 • 804-739-1751 • fax: 804-739-1753

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

CLIENT PROJECT #: 1242 Yeamans Hall Rd.

JOB SITE: TAT:

TESC LOGIN #: IR0919H  
 DATE OF RECEIPT: 09/19/2018  
 DATE OF ANALYSIS: 09/21/2018  
 DATE OF REPORT: 09/24/2018  
 ANALYST: B. Gjola

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
| 6             | 14-44           | 0.42              | 74.5                     | 14.5                     | 11                                 | NAD              |
| 7             | 15-47           | 0.324             | 79                       | 17.6                     | 3.4                                | NAD              |
| 8             | 16-50           | 0.635             | 72.4                     | 24.6                     | 3                                  | NAD              |
| 9             | 17-53           | 0.406             | 48                       | 50                       | 2                                  | NAD              |
| 10            | 18-56           | 0.325             | 70.8                     | 24.3                     | 4.9                                | NAD              |

*Brenden Tang*

Reviewed By Authorized Signatory

*Feng Jiang, J.S. Scire (Principal, Laboratory Director)  
 Brenden Tang, Senior Analyst*

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 [LEGEND: NAD – No Asbestos Detected; NA – Not Analyzed; PS – Positive Strip; Trace – 1%, NVA – No Visual Asbestos]

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

12509 East Boundary Road, Suite B, Middlefield, VA 23112 • 804-739-1751 • Fax: 804-739-1750

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

CLIENT PROJECT #: 1242 Yeamans Hall Rd

JOBSITE TAT: B. Gjoka

TESC LOGIN #: 18P119A

DATE OF RECEIPT: 09/19/2018

DATE OF ANALYSIS: 09/21/2018

DATE OF REPORT: 09/23/2018

ANALYST: B. Gjoka

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
| 11            | 20-65           | 0.42              | 72.9                     | 26.7                     | .4                                 | NAD              |
| 12            | 21-68           | 0.355             | 50.7                     | 45.1                     | 4.2                                | NAD              |
| 13            | 22-71           | 0.476             | 94.5                     | 2.7                      | 2.8                                | NAD              |
| 14            | 23-74           | 0.536             | 73                       | 26.2                     | .8                                 | NAD              |
| 15            | 24-77           | 0.876             | 14                       | 66.7                     | 19.3                               | NAD              |

*Ajudory Fang*

Reviewed By Authorized Signatory:  
 Feng Jiang, IES Senior Consultant, Laboratory Director  
 Feng Jiang, IES Senior Consultant, Laboratory Director

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**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middleham, VA 23112 • 804-799-1751 • Int: 804-799-1750

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

CLIENT PROJECT #: 1242 Yeamans Hall Rd.

JOB SITE: TAT

TESC LOGIN #: 18M19VL

DATE OF RECEIPT: 09/19/2018

DATE OF ANALYSIS: 09/21/2018

DATE OF REPORT: 09/24/2018

ANALYST: B. Gjoka

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
| 18            | 04-12           | 0.499             | 22.4                     | 73.7                     | 3.9                                | NAD              |

Total Sample(s) Analyzed: 16

*Grudoy Fang*

Fang, Jiang, LCS Senior Analyst, Laboratory Director  
 Fending Fang, Senior Analyst

Reviewed By Authorized Signatory:

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TESC LOGIN NUMBER: 180919D

TRIANGLE ENVIRONMENTAL SERVICE CENTER

13509 East Boundary Road, Suite B • Midlothian • VA • 23112 • Tel: 804-738-1761 • Fax: 804-738-1753

CHAIN OF CUSTODY FORM

LAB CUSTOMER: Trident Environmental Services, Inc.  
 ADDRESS: 500 Oakbrook Lane - Suite E  
 CITY, STATE, ZIP: Summerville, SC 29485  
 DATE: 9-18-18  
 CONTACT NAME: Robin Brown  
 PROJECT #: \_\_\_\_\_  
 PROJECT SITE: 1242 Yeamans Hall Rd  
 TAT: 2 Hour: \_\_\_\_\_ 6 Hour: PLU 24 Hour: PLU 48 Hour: PLU 5 Day: \_\_\_\_\_  
 CONTACT METHOD: Phone: 843-873-3648 Fax: 888-266-2040 Email: On TESC File

| Sample number                    | Sample Date      | Bulk ID by PLM                       | Asbestos           |                     |                      | Lead               |                     |                  | Other Metals       |                  |                  |                    | Air Quality/Model |                  |                    |                     | Comments         |                    |                  |                  |                     |                  |                  |                    |                  |                  |                    |                              |                                |                    |                  |                  |                    |                  |                  |                    |                  |                  |
|----------------------------------|------------------|--------------------------------------|--------------------|---------------------|----------------------|--------------------|---------------------|------------------|--------------------|------------------|------------------|--------------------|-------------------|------------------|--------------------|---------------------|------------------|--------------------|------------------|------------------|---------------------|------------------|------------------|--------------------|------------------|------------------|--------------------|------------------------------|--------------------------------|--------------------|------------------|------------------|--------------------|------------------|------------------|--------------------|------------------|------------------|
|                                  |                  |                                      | PCM Fiber Count    | PLM Point Count 400 | PLM Point Count 1000 | PLM Gravimetric    | CARB 435 (So2 only) | TEM AHERA Air    | TEM Bulk Chatfield | Air              | Pb (%) & PPM)    | So2 (PPM)          | Mise              | TCLP (Pb)        | Waster Water       | Drinking Water (Pb) |                  | TCLP RCRA 8        | CAM 17           | Welding Fume     | Toxic Metal Profile | Bioassess        | Grde             | Surface Tape       | Surface Swab     | Guk              | Ar Volume (L)      | Wipe Area (ft <sup>2</sup> ) | Scrape Area (cm <sup>2</sup> ) |                    |                  |                  |                    |                  |                  |                    |                  |                  |
| Released by: <u>Hunder H. So</u> | Signature: _____ | Date/Time: <u>9-18-18 1:11:15 PM</u> | Released by: _____ | Signature: _____    | Date/Time: _____     | Released by: _____ | Signature: _____    | Date/Time: _____ | Released by: _____ | Signature: _____ | Date/Time: _____ | Released by: _____ | Signature: _____  | Date/Time: _____ | Released by: _____ | Signature: _____    | Date/Time: _____ | Released by: _____ | Signature: _____ | Date/Time: _____ | Released by: _____  | Signature: _____ | Date/Time: _____ | Released by: _____ | Signature: _____ | Date/Time: _____ | Released by: _____ | Signature: _____             | Date/Time: _____               | Released by: _____ | Signature: _____ | Date/Time: _____ | Released by: _____ | Signature: _____ | Date/Time: _____ | Released by: _____ | Signature: _____ | Date/Time: _____ |
| Received by: _____               | Signature: _____ | Date/Time: _____                     | Received by: _____ | Signature: _____    | Date/Time: _____     | Received by: _____ | Signature: _____    | Date/Time: _____ | Received by: _____ | Signature: _____ | Date/Time: _____ | Received by: _____ | Signature: _____  | Date/Time: _____ | Received by: _____ | Signature: _____    | Date/Time: _____ | Received by: _____ | Signature: _____ | Date/Time: _____ | Received by: _____  | Signature: _____ | Date/Time: _____ | Received by: _____ | Signature: _____ | Date/Time: _____ | Received by: _____ | Signature: _____             | Date/Time: _____               | Received by: _____ | Signature: _____ | Date/Time: _____ | Received by: _____ | Signature: _____ | Date/Time: _____ | Received by: _____ | Signature: _____ | Date/Time: _____ |
| Released by: _____               | Signature: _____ | Date/Time: _____                     | Released by: _____ | Signature: _____    | Date/Time: _____     | Released by: _____ | Signature: _____    | Date/Time: _____ | Released by: _____ | Signature: _____ | Date/Time: _____ | Released by: _____ | Signature: _____  | Date/Time: _____ | Released by: _____ | Signature: _____    | Date/Time: _____ | Released by: _____ | Signature: _____ | Date/Time: _____ | Released by: _____  | Signature: _____ | Date/Time: _____ | Released by: _____ | Signature: _____ | Date/Time: _____ | Released by: _____ | Signature: _____             | Date/Time: _____               | Released by: _____ | Signature: _____ | Date/Time: _____ | Released by: _____ | Signature: _____ | Date/Time: _____ | Released by: _____ | Signature: _____ | Date/Time: _____ |

Prepared by TESC  
 Release date, SLDHE labels for NDBS, A/E/T upon Request

1809/9D  
180919L  
16 TEM Bulk

**TES**  
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 Summerville, SC 29485  
 Phone (843) 673-3645  
 Fax (843) 673-3767

**CHAIN OF CUSTODY FORM**  
 Asbestos Bulk Samples

Project Name: 1242 Yeamans Hall Rd Date: 9-18-18  
 Location: Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |           |               |                 |              | ASSESSMENT OF MATERIALS |               |               |              |
|---------------------------------|-----------|---------------|-----------------|--------------|-------------------------|---------------|---------------|--------------|
| Sampling Area                   | Sample ID | Location      | Description     | Priority (+) | Priority (-)            | Asbestos Type | COND Asbestos | HAZ Asbestos |
| 01                              | 01        | Exterior Wall | Trussite Panel  |              |                         |               |               |              |
|                                 | 02        |               |                 |              |                         | X             |               |              |
|                                 | 03        |               |                 |              |                         |               |               |              |
| 02                              | 04        | ↓             | Siding Felt     |              |                         |               |               |              |
|                                 | 05        |               |                 |              |                         | X             |               |              |
|                                 | 06        |               |                 |              |                         |               |               |              |
| 03                              | 07        | Window        | Window Siding   |              |                         |               |               |              |
|                                 | 08        |               |                 |              |                         |               |               |              |
|                                 | 09        |               |                 |              |                         |               |               |              |
| 04                              | 10        | Window        | Exterior Gutter |              |                         |               |               | X            |
|                                 | 11        | Door          |                 |              |                         |               |               |              |
|                                 | 12        | Door          |                 |              |                         |               |               |              |
| 05                              | 13        | Roof          | Roof Shingle    |              |                         |               |               | X            |
|                                 | 14        |               |                 |              |                         |               |               |              |
|                                 | 15        |               |                 |              |                         |               |               |              |
| 06                              | 16        |               | Roof Felt       |              |                         |               |               | X            |
|                                 | 17        |               |                 |              |                         |               |               |              |
|                                 | 18        |               |                 |              |                         |               |               |              |
| 07                              | 19        |               | Siding Mustil   |              |                         |               |               | X            |
|                                 | 20        |               |                 |              |                         |               |               |              |
|                                 | 21        |               |                 |              |                         |               |               |              |

|   |   |  |
|---|---|--|
| <b>CONDITION Assessment Categories</b><br>(1) Thermal Systems Insulation - Good Condition<br>(2) Thermal Systems Insulation - Damaged<br>(3) Thermal Systems Insulation - Significantly Damaged<br>(4) Gutters - Good Condition<br>(5) Gutters - Damaged<br>(6) Gutters - Significantly Damaged | <b>Asbestos Types</b><br>(1) Amosite<br>(2) Chrysotile<br>(3) Crocidolite<br>(4) Anthophyllite<br>(5) Tremolite<br>(6) Actinolite | <b>HAZARD Assessment Categories</b><br>G = Good Condition<br>D = Damaged<br>S = Significantly Damaged<br>LPO = Low Potential for Disturbance |
|---|---|--|

Samples Collected by: Hunter H. Jones Date / Time: 9-18-18  
 Samples Received by: [Signature] Date / Time: 9/19/18 9:40am

**TES**  
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 Consultants in Industrial Hygiene and Safety  
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 Summerville, SC 29485  
 Phone (843) 873-3848  
 Fax (843) 873-1707

180919D  
180919L

CHAIN OF CUSTODY FORM  
Asbestos Bulk Samples

Project Name: 1242 Yeaman Hall Rd Date: 9-18-18  
 Location: Hanahan SC

| DESCRIPTION OF EACH SAMPLE AREA |           |               |                 |             | ASSESSMENT OF MATERIALS |               |               |              |
|---------------------------------|-----------|---------------|-----------------|-------------|-------------------------|---------------|---------------|--------------|
| Sampling Area                   | Sample ID | Location      | Description     | Friable (+) | Friable (-)             | Asbestos Type | COND Asbestos | HAZ Asbestos |
|                                 | 22        | Kitchen A     | Sink Grouting   |             | X                       |               | ?             |              |
|                                 | 23        | ↓             | (Black)         |             |                         |               |               |              |
|                                 | 24        | ↓             |                 |             |                         |               |               |              |
|                                 | 25        | Kitchen A     | Drywall         | X           |                         |               | ?             |              |
|                                 | 26        | ↓             |                 |             |                         |               |               |              |
|                                 | 27        | ↓             |                 |             |                         |               |               |              |
|                                 | 28        | Kitchen A     | Joint Compound  | X           |                         |               | ?             |              |
|                                 | 29        | Living Room A |                 |             |                         |               |               |              |
|                                 | 30        | Bedroom 1     |                 |             |                         |               |               |              |
|                                 | 31        | Room 3        |                 |             |                         |               |               |              |
|                                 | 32        | Living Room B |                 |             |                         |               |               |              |
|                                 | 33        | Living Room B | Ceiling Texture | X           |                         |               | ?             |              |
|                                 | 34        |               | (texture)       |             |                         |               |               |              |
|                                 | 35        |               |                 |             |                         |               |               |              |
|                                 | 36        | Kitchen A     | Ceiling Texture | X           |                         |               | ?             |              |
|                                 | 37        |               | (White)         |             |                         |               |               |              |
|                                 | 38        |               |                 |             |                         |               |               |              |
|                                 | 39        | Kitchen B     | Sink Grouting   |             | X                       |               | ?             |              |
|                                 | 40        |               | (gray)          |             |                         |               |               |              |
|                                 | 41        |               |                 |             |                         |               |               |              |

|  |  |   |
|--|--|---|
| <p><b>CONDITION Assessment Categories</b></p> <p>(1) Thermal Systems Insulation - Good Condition<br/>                 (2) Thermal Systems Insulation - Damaged<br/>                 (3) Thermal Systems Insulation - Significantly Damaged<br/>                 (4) Surfacing - Good Condition<br/>                 (5) Surfacing - Damaged<br/>                 (6) Surfacing - Significantly Damaged</p> | <p><b>Asbestos Present</b></p> <p>(1) Amosite<br/>                 (2) Chrysotile<br/>                 (3) Crocidolite<br/>                 (4) Anthophyllite<br/>                 (5) Tremolite<br/>                 (6) Actinolite</p> | <p><b>HAZARD Assessment Categories</b></p> <p>G = Good Condition<br/>                 D = Damaged<br/>                 S = Significantly Damaged<br/>                 LPD = Low Potential for Disturbance</p> |
|--|--|---|

Samples Collected by: Hunter Hanan Date / Time: 9-18-18  
 Samples Received by: [Signature] Date / Time: 9/19/18 9:40am  
[Signature]

180419  
1809

**TES**  
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 Summerville, SC 29485  
 Phone (843) 873-3848  
 Fax (843) 873-1787

**CHAIN OF CUSTODY FORM**  
 Asbestos Bulk Samples

Project Name: 124 Yeamans Hall Date: 9-18-18  
 Location: Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |           |           |                   |             | ASSESSMENT OF MATERIALS |               |             |            |
|---------------------------------|-----------|-----------|-------------------|-------------|-------------------------|---------------|-------------|------------|
| Sample Area                     | Sample ID | Location  | Description       | Friable (+) | Friable (-)             | Asbestos Type | COND Assess | HAZ Assess |
| 14                              | 42        | Kitchen A | Hand Sanded Floor |             |                         |               |             |            |
|                                 | 43        | Kitchen A | (Floor)           |             |                         |               |             |            |
|                                 | 44        | Room 2    | no material       |             |                         |               |             |            |
| 15                              | 45        | Kitchen A | Hand Sanded Floor | X           |                         |               |             |            |
|                                 | 46        |           | (Floor)           |             |                         |               |             |            |
|                                 | 47        |           | no material       |             |                         |               |             |            |
| 16                              | 48        | Kitchen A | Hand Sanded Floor |             | X                       |               |             |            |
|                                 | 49        |           | (Floor)           |             |                         |               |             |            |
|                                 | 50        | Room 2    | no material       |             |                         |               |             |            |
| 17                              | 51        | Room 1    | Play Street Floor |             | X                       |               |             |            |
|                                 | 52        | Room 1    | (Floor)           |             |                         |               |             |            |
|                                 | 53        | Room 1    | no material       |             |                         |               |             |            |
| 18                              | 54        | Room 1    | Hand Sanded Floor | X           |                         |               |             |            |
|                                 | 55        |           | (Floor)           |             |                         |               |             |            |
|                                 | 56        |           | no material       |             |                         |               |             |            |
| 19                              | 57        | Room 1    | Hand Sanded Floor | X           |                         |               |             |            |
|                                 | 58        |           | (Floor)           |             |                         |               |             |            |
|                                 | 59        | Room 1    | Hand Sanded Floor |             |                         |               |             |            |
| 20                              | 60        | Room 1    | Hand Sanded Floor |             | X                       |               |             |            |
|                                 | 61        |           | (Floor)           |             |                         |               |             |            |
|                                 | 62        | Room 1    | Hand Sanded Floor |             |                         |               |             |            |

|   |  |   |
|---|--|---|
| <p><b>CONDITION Assessment Categories</b></p> <p>(1) Thermal System Insulation - Good Condition<br/>           (2) Thermal System Insulation - Damaged<br/>           (3) Thermal System Insulation - Significantly Damaged<br/>           (4) Surfacing - Good Condition<br/>           (5) Surfacing - Damaged<br/>           (6) Surfacing - Significantly Damaged</p> | <p><b>Asbestos Present</b></p> <p>(1) Amosite<br/>           (2) Chrysotile<br/>           (3) Crocidolite<br/>           (4) Anthophyllite<br/>           (5) Tremolite<br/>           (6) Actinolite</p> | <p><b>HAZARD Assessment Categories</b></p> <p>G = Good Condition<br/>           D = Damaged<br/>           S = Significantly Damaged<br/>           LPD = Low Potential for Disturbance</p> |
|---|--|---|

Samples Collected by: Hunter Hanahan Date / Time: 9-18-18  
 Samples Received by: [Signature] Date / Time: 9/19/18 9:40am  
[Signature] 1:50pm

**TES**  
 Trident Environmental Services, Inc.  
 Consultants in Industrial Hygiene and Safety  
 500 Ostrink Lane, Suite E  
 Summerville, SC 29485  
 Phone (843) 873-3840  
 Fax (843) 871-1787

180414D  
1809'9L

CHAIN OF CUSTODY FORM  
Asbestos Bulk Samples

Project Name: 1242 Yeamans Hall Rd Date: 9-18-18  
 Location: Hanahan SC

| DESCRIPTION OF EACH SAMPLE AREA |           |                  |                                   |             |             | ASSESSMENT OF MATERIALS |            |           |
|---------------------------------|-----------|------------------|-----------------------------------|-------------|-------------|-------------------------|------------|-----------|
| Room Area                       | Sample ID | Location         | Description                       | Friable (+) | Friable (-) | Asbestos Type           | OCSD Asses | HAZ Asses |
| 20                              | 63        | Room A L1        | Vinyl Sheet Floor (1K wood)       |             | X           |                         |            |           |
|                                 | 64        | ↓                | normal tile                       |             |             |                         |            |           |
|                                 | 65        | ↓                | normal tile                       |             |             |                         |            |           |
| 21                              | 66        | Living Room B L1 | Vinyl Sheet Floor (Stone)         |             | X           |                         |            |           |
|                                 | 67        | ↓                | normal tile                       |             |             |                         |            |           |
|                                 | 68        | Kitchen B L1     | normal tile                       |             |             |                         |            |           |
| 22                              | 69        | Living Room      | Floor Felt Paper                  |             | X           |                         |            |           |
|                                 | 70        | Room 3           |                                   |             |             |                         |            |           |
|                                 | 71        | Room 4           |                                   |             |             |                         |            |           |
| 23                              | 72        | Room 3 L1        | Vinyl Sheet Floor (DK wood)       |             | X           |                         |            |           |
|                                 | 73        | ↓                | normal tile                       |             |             |                         |            |           |
|                                 | 74        | Room 4 L1        | normal tile                       |             |             |                         |            |           |
| 24                              | 75        | Room 4 L2        | 12" Self Stuck tile (Beige Stone) |             | X           |                         |            |           |
|                                 | 76        | ↓                |                                   |             |             |                         |            |           |
|                                 | 77        | ↓                |                                   |             |             |                         |            |           |

|   |  |   |
|---|--|---|
| <p><b>CONDITION Assessment Categories</b></p> <p>(1) Thermal System Insulation - Good Condition<br/>                 (2) Thermal System Insulation - Damaged<br/>                 (3) Thermal System Insulation - Significantly Damaged<br/>                 (4) Surfing - Good Condition<br/>                 (5) Surfing - Damaged<br/>                 (6) Surfing - Significantly Damaged</p> | <p><b>Asbestos Types</b></p> <p>(1) Amosite<br/>                 (2) Chrysotile<br/>                 (3) Crocidolite<br/>                 (4) Anthophyllite<br/>                 (5) Tremolite<br/>                 (6) Actinolite</p> | <p><b>HAZARD Assessment Categories</b></p> <p>G = Good Condition<br/>                 D = Damaged<br/>                 S = Significantly Damaged<br/>                 LPD = Low Potential for Disturbance</p> |
|---|--|---|

Samples Collected by: A. Lantz Hanson Date / Time: 9-18-18  
 Samples Received by: Pragya Chandra Date / Time: 9/19/18 9:40am  
Pragya Chandra 1:31pm



# **COMPREHENSIVE ASBESTOS SURVEY**

**COMMERCIAL BUILDING  
5902 HOWARD STREET  
HANAHAN, SC 29410**



*Prepared For:*

**CITY OF HANAHAN  
Attn: Mrs. Katherine Farias  
1255 Yeamans Hall Road  
Hanahan, SC 29410  
(843) 576-5254**

*Performed By:*

**— T E S —**

**Trident Environmental Services, Inc.**

*Consultants in Industrial Hygiene and Safety*  
500 Oakbrook Lane, Suite E  
Summerville, SC 29485  
(843) 873-3648

# COMPREHENSIVE ASBESTOS SURVEY

Commercial Building  
5902 Howard Street  
Hanahan, SC 29410

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## EXECUTIVE SUMMARY

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 19, 2018 of the Commercial Building located at 5902 Howard Street in Hanahan, South Carolina did reveal the presence of asbestos containing building materials. The following summary exhibits the asbestos containing building materials (ACBM) that were identified in the inspection.

### Asbestos

| Description                       | Type                      |
|-----------------------------------|---------------------------|
| Transite Siding                   | Category II – Non Friable |
| Brick Mastic (black)              | Category I – Non Friable  |
| Joint Compound                    | RACM – Friable            |
| Ceiling Panel                     | RACM – Friable            |
| 12” Floor Tile (beige)            | RACM – Friable            |
| Floor Tile Mastic (tan)           | Category I – Non Friable  |
| Vinyl Sheet Flooring (red/orange) | RACM – Friable            |

RACM – Regulated Asbestos Containing Material

The identified ACBM includes the item(s) listed above. All removal work of the identified ACBM should be performed by a properly trained and licensed abatement contractor prior to the planned renovation/demolition activities.

## BACKGROUND

Trident Environmental Services, Inc. was contracted by City of Hanahan to perform a comprehensive asbestos survey of the Commercial Building located at 5902 Howard Street in Hanahan, South Carolina. The survey was performed in order to satisfy the NESHAP requirements for renovation and/or demolition. The structure contains three one bedroom, one bathroom apartments constructed on foundation and consisting of approximately 1,900 square feet. Interior walls and ceilings are drywall with joint compound applied at the seams and patches. Floor finishes include vinyl floor tiles, vinyl sheet flooring, hardwood and carpet. Roofing material consists of asphalt shingles and felt paper. Exterior construction is wood, with wood trim, soffits, eaves doors/windows and transite siding,

### Asbestos

The inspection was conducted to identify asbestos-containing building materials (ACBM) which may be disturbed during the renovation/demolition activities. The identification of ACBM will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos fibers. Identification of ACBM also complies with Title 40 Code of the Federal Regulations, Part 61, and South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1, along with Title 29 Code of Federal Regulations, Part 1926 enforced by the Occupational Safety and Health Administration (OSHA). The Asbestos Survey describes the investigative procedures utilized, results of the suspect ACBM sampled/analyzed, and recommendations regarding the structures as related to asbestos.

## ASBESTOS SURVEY

### Asbestos Investigative Procedures

Trident Environmental Services, Inc. conducted an inspection for suspect ACM on September 19, 2018 of the Commercial Building located at 5902 Howard Street in Hanahan, South Carolina. It is our understanding that the subject structure will undergo renovation or demolition activities in the near future. The asbestos survey was performed by observing and sampling suspect building materials. Significant destructive testing was not utilized during the inspection. There is a possibility that suspect materials exist in inaccessible areas such as wall cavities and pipe chases. If any additional suspect ACM are discovered during the course of demolition activities, bulk samples should be extracted to identify the presence, or absence, of asbestos prior to continuation of work activities.

A sampling strategy was developed to provide representative samples for analysis. Samples were then extracted from a variety of suspect ACM. Bulk samples collected were recorded on a Chain-of-Custody record and submitted to Trident Environmental Service Center, Inc. (TESC) a Polarized Light Microscopy (PLM) laboratory. The laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology (NIST). TESC is accredited by NVLAP for the analysis of bulk asbestos by PLM ([NVLAP Lab Code: 200794-0](#)).

The suspect materials were analyzed by trained microscopists utilizing PLM techniques coupled with dispersion staining in accordance with EPA Test Method Title 40 Code of Federal Regulations, Chapter I (1-1-87 edition), Part 763, Subpart F- Appendix A. This method identifies asbestos mineral fibers based on six optical characteristics: morphology, birefringence, refractive index, extinction angle, sign of elongation and dispersion staining colors. The laboratory analysis reports the specific type of asbestos identified (there are six asbestos minerals) and the percentage of asbestos present. The EPA and OSHA defines materials as asbestos containing if an asbestos content of greater than one percent (>1%) is detected in a representative sample.

Non-Friable Organically Bound (NOB) samples were submitted to AmeriSci Richmond Laboratory for analyses by Transmission Electron Microscopy (TEM). SCDHEC requires NOB materials with negative or trace results by PLM to be analyzed by at least one TEM. SCDHEC in accordance with ASTM E 2356-04 defines NOB materials as “materials that are not friable and that consist of fibers and other particulate matter embedded in a solid matrix of asphalt, vinyl or other organic substances.” Examples of NOB materials include but are not limited to flooring materials such as vinyl floor tiles, vinyl sheet flooring, adhesives, mastics, asphalt shingles, roofing materials, glazing, caulks, and cove base.

The EPA classifies ACBM into two categories, friable and non-friable. A friable material creates a greater health hazard due to the fact that it may be “crumbled, pulverized or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations.”

*Friable Asbestos* material means any material containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763 section I, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

*Category I Non Friable Asbestos-Containing Material (ACM)* means asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763, section I, Polarized Light Microscopy.

*Category II Non Friable ACM* means any material, excluding Category I non friable ACM, containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, 40 CFR part 763, section I, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. (cement siding, transite board shingles, etc.)

*Regulated Asbestos-Containing Material (RACM)* means (a) Friable asbestos material, (b) Category I non friable ACM that has become friable, (c) Category I non friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The following section summarizes the sample numbers, locations, type material, asbestos type, percent of asbestos detected, present condition of the asbestos containing material, potential for disturbance, and hazard assessment ratings. The asbestos sample laboratory analyses and chain of custody records are included at the end of this report.

**Asbestos Abbreviations and Hazard Assessment Key**

The EPA and SCDHEC require that confirmed ACBM is given a hazard assessment based on its present condition and potential for future disturbance. This hazard assessment is used as a tool for prioritization in future remedial actions regarding the ACBM. The following key demonstrates the criteria that make up the hazard assessment.

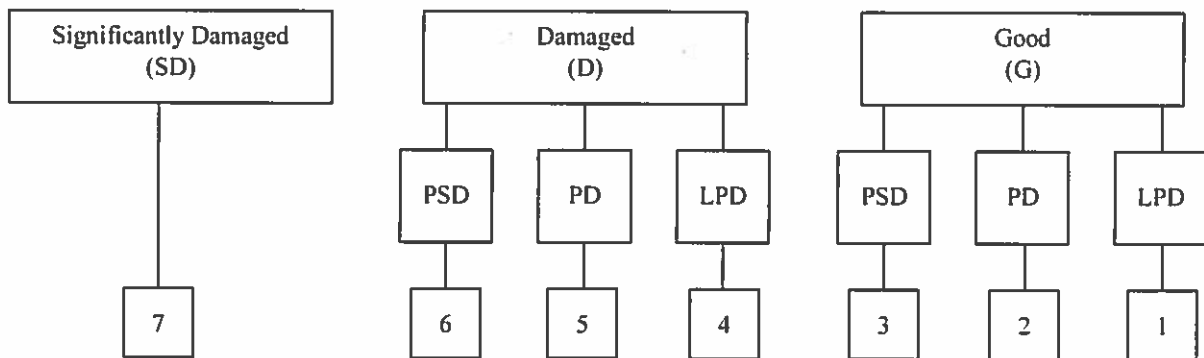
**Present Condition**

- F = Friable
- NF = Non-friable
- G = Good (very localized limited damage)
- D = Damaged (<10% distributed and/or <25% localized)
- S = Significantly Damaged ( $\geq$ 10% distributed and/or 25% localized)

**Potential for Future Disturbance**

- LPD = Low Potential for Disturbance (Contact, Vibration, and/or Air Erosion – low concern)
- PD = Potential for Damage (Contact, Vibration, and/or Air Erosion – moderate concern)
- PSD = Potential for Significant Damage (Contact, Vibration and/or Air Erosion – high concern)

**Hazard Assessment**



**HOMOGENOUS AREA ESTIMATED FOOTAGE TABLE**  
**Commercial Building – 5902 Howard Street – Hanahan, SC**

| HOMOGENOUS AREA ID # | DESCRIPTION                               | ESTIMATED AMOUNT |
|----------------------|---|------------------|
| <b>01</b>            | <b>Transite Siding</b>                    | <b>3,330 SF</b>  |
| 02                   | Siding Felt                               | 3,330 SF         |
| 03                   | Window Glazing                            | 52 SF            |
| 04                   | Exterior Caulk                            | 100 SF           |
| 05                   | Roof Shingle                              | 2,293 SF         |
| 06                   | Roof Felt                                 | 2,293 SF         |
| <b>07</b>            | <b>Brick Mastic (black)</b>               | <b>16 SF</b>     |
| 08                   | MDF Board                                 | 280 SF           |
| 09                   | Drywall                                   | 4,676 SF         |
| <b>10</b>            | <b>Joint Compound</b>                     | <b>4,956 SF</b>  |
| <b>11</b>            | <b>Ceiling Panel</b>                      | <b>35 SF</b>     |
| <b>12</b>            | <b>12" Floor Tile (beige)</b>             | <b>189 SF</b>    |
| <b>13</b>            | <b>Floor Tile Mastic (tan)</b>            | <b>189 SF</b>    |
| 14                   | Vinyl Sheet Flooring (green/red)          | 329 SF           |
| 15                   | Vinyl Sheet Flooring (gray/red/yellow)    | 189 SF           |
| 16                   | Vinyl Sheet Flooring (red brick)          | 50 SF            |
| 17                   | Vinyl Sheet Flooring (blue brick)         | 160 SF           |
| 18                   | Vinyl Mastic (tan)                        | 160 SF           |
| 19                   | Vinyl Sheet Flooring (12" slate)          | 194 SF           |
| 20                   | Vinyl Sheet Flooring (9" beige squares)   | 108 SF           |
| 21                   | Floor Felt Paper                          | 108 SF           |
| 22                   | Vinyl Sheet Flooring (green/beige circle) | 108 SF           |
| 23                   | Vinyl Sheet Flooring (green rocks)        | 108 SF           |
| 24                   | Vinyl Sheet Flooring (red flower)         | 140 SF           |
| 25                   | Vinyl Sheet Flooring (wood)               | 290 SF           |
| 26                   | 12" Self-Stick Floor Tile (dark slate)    | 10 SF            |
| 27                   | Vinyl Floor Plank (dark wood)             | 36 SF            |
| <b>28</b>            | <b>Vinyl Sheet Flooring (red/orange)</b>  | <b>60 SF</b>     |

**ASBESTOS SUMMARY**  
**Commercial Building – 5902 Howard Street – Hanahan, SC**

| DESCRIPTION                       | TYPE                      | ESTIMATED AMOUNT |
|-----------------------------------|---------------------------|------------------|
| Transite Siding                   | Category II – Non Friable | 3,330 SF         |
| Brick Mastic (black)              | Category I – Non Friable  | 16 SF            |
| Joint Compound                    | RACM – Friable            | 4,956 SF         |
| Ceiling Panel                     | RACM – Friable            | 35 SF            |
| 12” Floor Tile (beige)            | RACM – Friable            | 189 SF           |
| Floor Tile Mastic (tan)           | Category I – Non Friable  | 189 SF           |
| Vinyl Sheet Flooring (red/orange) | RACM – Friable            | 60 SF            |

RACM – Regulated Asbestos Containing Material

\*PACM - Presumed Asbestos Containing Material

*SCDHEC requires any non-friable material that is identified in an asbestos inspection report in a condition other than good and non-friable must be handled as a Regulated Asbestos Containing Material (RACM) and identified as friable on the asbestos abatement application. This requirement is reflected in the Asbestos Summary Table listed above.*

Asbestos fibers were identified in the Transite Siding. Approximately 3,330 square feet is present and in good condition. This material is considered Category II – Non Friable Asbestos and is located on the exterior.

Asbestos fibers were identified in the Brick Mastic (black). Approximately 16 square feet is present and in good condition. This material is considered Category I – Non Friable Asbestos and is located around the roof.

Asbestos fibers were identified in the Joint Compound. Approximately 4,956 square feet is present and is good condition. This material is considered RACM – Friable Asbestos and is located on the walls and ceilings.

Asbestos fibers were identified in the Ceiling Panel. Approximately 35 square feet is present and is significantly damaged. This material is considered RACM – Friable Asbestos and is located on the Shop ceiling and above the ceiling in Bedroom 4.

Asbestos fibers were identified in the 12” Floor Tile (beige). Approximately 189 square feet is present and in good condition. This material is considered RACM – Friable Asbestos and is located in the Kitchen inside Unit A. (layer 1) **Note: Floor Tile Mastic may be located under cabinets or non-load bearing walls.**



Asbestos fibers were identified in the Floor Tile Mastic (tan). Approximately 189 square feet is present and in good condition. This material is considered Category I – Non Friable Asbestos and is located in the Kitchen inside Unit A. (layer 1). **Note: Floor Tile Mastic may be located under cabinets or non-load bearing walls.**

Asbestos fibers were identified in the Vinyl Sheet Flooring (red/orange). Approximately 60 square feet is present and in good condition. This material is considered RACM – Friable Asbestos and is located in the Bathroom inside Unit C. **Note: Floor Tile Mastic may be located under cabinets or non-load bearing walls.**

The estimated quantities provided should be verified by contractor and/or building owner. **Any discrepancies are to be addressed prior to removal of ACM.** Please note that removal costs vary depending on the contractor, the quantity/condition of the ACM, and the accessibility/location of the ACM.

## ASBESTOS SAMPLE DATA TABLE

### Commercial Building – 5902 Howard Street – Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |                      |                 |               | LABORATORY       |          | ASSESSMENT OF MATERIALS       |                            |
|---------------------------------|----------------------|-----------------|---------------|------------------|----------|-------------------------------|----------------------------|
| Homogeneous Area & Sample ID    | Description          | Location/Room # | Friable (Y/N) | Asbestos Present |          | Condition Assessment Category | Hazard Assessment Category |
|                                 |                      |                 |               | Percent          | Asbestos |                               |                            |
| 01-01                           | Transite Siding      | Exterior Siding | N             | 20.0%            | CHRY     | 7                             | 3                          |
| 01-02                           | Transite Siding      | Exterior Siding | N             | NT               | PACM     | 7                             | 3                          |
| 01-03                           | Transite Siding      | Exterior Siding | N             | NT               | PACM     | 7                             | 3                          |
| 02-04                           | Siding Felt          | Exterior Siding | N             | 0.0%             | ND       | 7                             | N/A                        |
| 02-05                           | Siding Felt          | Exterior Siding | N             | 0.0%             | ND       | 7                             | N/A                        |
| 02-06 T                         | Siding Felt          | Exterior Siding | N             | 0.0%             | ND       | 7                             | N/A                        |
| 03-07                           | Window Glazing       | Window 1        | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 03-08                           | Window Glazing       | Window 2        | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 03-09 T                         | Window Glazing       | Window 3        | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 04-10                           | Exterior Caulk       | Window 1        | N             | 0.0%             | ND       | 7                             | N/A                        |
| 04-11                           | Exterior Caulk       | Door 1          | N             | 0.0%             | ND       | 7                             | N/A                        |
| 04-12 T                         | Exterior Caulk       | Door 2          | N             | <1.0%            | CHRY     | 7                             | N/A                        |
| 05-13                           | Roof Shingle         | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 05-14                           | Roof Shingle         | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 05-15 T                         | Roof Shingle         | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 06-16                           | Roof Felt            | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 06-17                           | Roof Felt            | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 06-18 T                         | Roof Felt            | Exterior Roof   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 07-19                           | Brick Mastie (black) | Exterior Roof   | N             | 10.0%            | CHRY     | 7                             | 1                          |
| 07-20                           | Brick Mastie (black) | Exterior Roof   | N             | NT               | PACM     | 7                             | 1                          |
| 07-21 T                         | Brick Mastie (black) | Exterior Roof   | N             | NT               | PACM     | 7                             | 1                          |
| 08-22                           | MDF Board            | Living Room B   | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 08-23                           | MDF Board            | Living Room B   | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 08-24                           | MDF Board            | Living Room B   | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 09-25                           | Drywall              | Bedroom A       | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 09-26                           | Drywall              | Bedroom A       | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 09-27                           | Drywall              | Bedroom A       | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 10-28                           | Joint Compound       | Living Room A   | Y             | 2.0%             | CHRY     | 4                             | 3                          |
| 10-29                           | Joint Compound       | Living Room A   | Y             | NT               | PACM     | 4                             | 3                          |

Assessment Categories

- |  |   |
|--|---|
| (1) Thermal Systems Insulation – Good Condition        | (5) Surfacing – Damaged                   |
| (2) Thermal Systems Insulation – Damaged               | (6) Surfacing – Significantly Damaged     |
| (3) Thermal Systems Insulation – Significantly Damaged | (7) Miscellaneous – Good Condition        |
| (4) Surfacing – Good Condition                         | (8) Miscellaneous – Damaged               |
|  | (9) Miscellaneous – Significantly Damaged |

Asbestos Present

- |                      |                          |
|----------------------|--------------------------|
| AMOS – Amosite       | ACT1 – Actinolite        |
| CHRY – Chrysotile    | ND – None Detected       |
| CROC – Crocidolite   | NT – Not Tested          |
| ANTH – Anthophyllite | PACM – Presumed ACM      |
| TREM – Tremolite     | <b>Asbestos Detected</b> |

## ASBESTOS SAMPLE DATA TABLE

### Commercial Building – 5902 Howard Street – Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |   |                       |               | LABORATORY       |          | ASSESSMENT OF MATERIALS       |                            |
|---------------------------------|---|-----------------------|---------------|------------------|----------|-------------------------------|----------------------------|
| Homogeneous Area & Sample ID    | Description                             | Location/Room #       | Friable (Y/N) | Asbestos Present |          | Condition Assessment Category | Hazard Assessment Category |
|                                 |   |                       |               | Percent          | Asbestos |                               |                            |
| 10-30                           | Joint Compound                          | Bedroom A             | Y             | NT               | PACM     | 4                             | 3                          |
| 10-31                           | Joint Compound                          | Bedroom 2 B           | Y             | NT               | PACM     | 4                             | 3                          |
| 10-32                           | Joint Compound                          | Living Room B         | Y             | NT               | PACM     | 4                             | 3                          |
| 10-33                           | Joint Compound                          | Kitchen B             | Y             | NT               | PACM     | 4                             | 3                          |
| 10-34                           | Joint Compound                          | Bedroom 1 B           | Y             | NT               | PACM     | 4                             | 3                          |
| 11-35                           | Ceiling Panel                           | Shop                  | Y             | 98.0%            | CHRY     | 9                             | 7                          |
| 11-36                           | Ceiling Panel                           | Shop                  | Y             | NT               | PACM     | 9                             | 7                          |
| 11-37                           | Ceiling Panel                           | Shop                  | Y             | NT               | PACM     | 9                             | 7                          |
| 12-38                           | 12" Floor Tile (beige)                  | Kitchen A – Layer 1   | Y             | 2.0%             | CHRY     | 7                             | 1                          |
| 12-39                           | 12" Floor Tile (beige)                  | Kitchen A – Layer 1   | Y             | NT               | PACM     | 7                             | 1                          |
| 12-40                           | 12" Floor Tile (beige)                  | Kitchen A – Layer 1   | Y             | NT               | PACM     | 7                             | 1                          |
| 13-41                           | Floor Tile Mastie (tan)                 | Kitchen A – Layer 1   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 13-42                           | Floor Tile Mastie (tan)                 | Kitchen A – Layer 1   | N             | 0.0%             | ND       | 7                             | N/A                        |
| 13-43                           | Floor Tile Mastie (tan)                 | Kitchen A – Layer 1   | N             | <1.9%            | CHRY     | 7                             | 1                          |
| 14-44                           | Vinyl Sheet Flooring (green/red)        | Kitchen A – Layer 2   | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 14-45                           | Vinyl Sheet Flooring (green/red)        | Living Room A Layer 2 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 14-46 T                         | Vinyl Sheet Flooring (green/red)        | Bedroom 3 Layer 2     | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 15-47                           | Vinyl Sheet Flooring (green/red/yellow) | Kitchen A – Layer 3   | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 15-48                           | Vinyl Sheet Flooring (green/red/yellow) | Kitchen A – Layer 3   | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 15-49 T                         | Vinyl Sheet Flooring (green/red/yellow) | Kitchen A – Layer 3   | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 16-50                           | Vinyl Sheet Flooring (red brick)        | Kitchen A – Layer 1   | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 16-51                           | Vinyl Sheet Flooring (red brick)        | Kitchen A – Layer 1   | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 16-52 T                         | Vinyl Sheet Flooring (red brick)        | Kitchen A – Layer 1   | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 17-53                           | Vinyl Sheet Flooring (blue brick)       | Living Room A Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |

**Assessment Categories**

- |  |   |
|--|---|
| (1) Thermal Systems Insulation – Good Condition        | (5) Surfacing – Damaged                   |
| (2) Thermal Systems Insulation – Damaged               | (6) Surfacing – Significantly Damaged     |
| (3) Thermal Systems Insulation – Significantly Damaged | (7) Miscellaneous – Good Condition        |
| (4) Surfacing – Good Condition                         | (8) Miscellaneous – Damaged               |
|  | (9) Miscellaneous – Significantly Damaged |

**Asbestos Present**

- |                      |                          |
|----------------------|--------------------------|
| AMOS – Amosite       | ACTI – Actinolite        |
| CHRY – Chrysotile    | ND – None Detected       |
| CROC – Crocidolite   | NT – Not Tested          |
| ANTH – Anthophyllite | PACM – Presumed ACM      |
| TREM – Tremolite     | <b>Asbestos Detected</b> |

## ASBESTOS SAMPLE DATA TABLE

### Commercial Building – 5902 Howard Street – Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |   |                       |               | LABORATORY       |          | ASSESSMENT OF MATERIALS       |                            |
|---------------------------------|---|-----------------------|---------------|------------------|----------|-------------------------------|----------------------------|
| Homogeneous Area & Sample ID    | Description                               | Location/Room #       | Friable (Y/N) | Asbestos Present |          | Condition Assessment Category | Hazard Assessment Category |
|                                 |   |                       |               | Percent          | Asbestos |                               |                            |
| 17-54                           | Vinyl Sheet Flooring (blue brick)         | Living Room A Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 17-55 T                         | Vinyl Sheet Flooring (blue brick)         | Living Room A Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 18-56                           | Vinyl Mastic (tan)                        | Living Room A Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 18-57                           | Vinyl Mastic (tan)                        | Living Room A Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 18-58 T                         | Vinyl Mastic (tan)                        | Living Room A Layer 1 | N             | 0.0%             | ND       | 7                             | N/A                        |
| 19-59                           | Vinyl Sheet Flooring (12" slate)          | Living Room A Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 19-60                           | Vinyl Sheet Flooring (12" slate)          | Living Room A Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 19-61 T                         | Vinyl Sheet Flooring (12" slate)          | Kitchen B Layer 1     | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 20-62                           | Vinyl Sheet Flooring (9" beige squares)   | Bathroom A Layer 1    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 20-63                           | Vinyl Sheet Flooring (9" beige squares)   | Bathroom A Layer 1    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 20-64 T                         | Vinyl Sheet Flooring (9" beige squares)   | Bathroom A Layer 1    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 21-65                           | Floor Felt Paper                          | Bathroom A Layer 2    | N             | 0.0%             | ND       | 7                             | N/A                        |
| 21-66                           | Floor Felt Paper                          | Bathroom A Layer 2    | N             | 0.0%             | ND       | 7                             | N/A                        |
| 21-67 T                         | Floor Felt Paper                          | Bathroom A Layer 2    | N             | 0.0%             | ND       | 7                             | N/A                        |
| 22-68                           | Vinyl Sheet Flooring (green/beige circle) | Bathroom A Layer 3    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 22-69                           | Vinyl Sheet Flooring (green/beige circle) | Bathroom A Layer 3    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 22-70 T                         | Vinyl Sheet Flooring (green/beige circle) | Bathroom A Layer 3    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 23-71                           | Vinyl Sheet Flooring (green rocks)        | Bathroom A Layer 4    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 23-72                           | Vinyl Sheet Flooring (green rocks)        | Bathroom A Layer 4    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 23-73 T                         | Vinyl Sheet Flooring (green rocks)        | Bathroom A Layer 4    | Y             | 0.0%             | ND       | 7                             | N/A                        |

**Assessment Categories**

- (1) Thermal Systems Insulation – Good Condition
- (2) Thermal Systems Insulation – Damaged
- (3) Thermal Systems Insulation – Significantly Damaged
- (4) Surfacing – Good Condition

- (5) Surfacing – Damaged
- (6) Surfacing – Significantly Damaged
- (7) Miscellaneous – Good Condition
- (8) Miscellaneous – Damaged
- (9) Miscellaneous – Significantly Damaged

**Asbestos Present**

- AMOS – Amosite
- CHRY – Chrysotile
- CROC – Crocidolite
- ANTH – Anthophyllite
- TREM – Tremolite
- ACT1 – Actinolite
- ND – None Detected
- NT – Not Tested
- PACM – Presumed ACM
- Asbestos Detected**

**ASBESTOS SAMPLE DATA TABLE**  
**Commercial Building – 5902 Howard Street – Hanahan, SC**

| DESCRIPTION OF EACH SAMPLE AREA |  |                       |               | LABORATORY       |          | ASSESSMENT OF MATERIALS       |                            |
|---------------------------------|--|-----------------------|---------------|------------------|----------|-------------------------------|----------------------------|
| Homogeneous Area & Sample ID    | Description                            | Location/Room #       | Friable (Y/N) | Asbestos Present |          | Condition Assessment Category | Hazard Assessment Category |
|                                 |  |                       |               | Percent          | Asbestos |                               |                            |
| 24-74                           | Vinyl Sheet Flooring (red flower)      | Bedroom 3 Layer 3     | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 24-75                           | Vinyl Sheet Flooring (red flower)      | Bedroom 3 Layer 3     | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 24-76 T                         | Vinyl Sheet Flooring (red flower)      | Bedroom 3 Layer 3     | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 25-77                           | Vinyl Sheet Flooring (wood)            | Living Room B Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 25-78                           | Vinyl Sheet Flooring (wood)            | Living Room B Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 25-79 T                         | Vinyl Sheet Flooring (wood)            | Living Room B Layer 1 | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 26-80                           | 12" Self-Stick Floor Tile (dark slate) | Kitchen B Layer 1     | N             | 0.0%             | ND       | 7                             | N/A                        |
| 26-81                           | 12" Self-Stick Floor Tile (dark slate) | Kitchen B Layer 1     | N             | 0.0%             | ND       | 7                             | N/A                        |
| 26-82 T                         | 12" Self-Stick Floor Tile (dark slate) | Kitchen B Layer 1     | N             | 0.0%             | ND       | 7                             | N/A                        |
| 27-83                           | Vinyl Floor Plank (dark wood)          | Bathroom B Layer 1    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 27-84                           | Vinyl Floor Plank (dark wood)          | Bathroom B Layer 1    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 27-85 T                         | Vinyl Floor Plank (dark wood)          | Bathroom B Layer 1    | Y             | 0.0%             | ND       | 7                             | N/A                        |
| 28-86                           | Vinyl Sheet Flooring (red/orange)      | Bathroom C Layer 1    | Y             | 20.0%            | CHRY     | 7                             | 3                          |
| 28-87                           | Vinyl Sheet Flooring (red/orange)      | Bathroom C Layer 1    | Y             | NT               | PACM     | 7                             | 3                          |
| 28-88                           | Vinyl Sheet Flooring (red/orange)      | Bathroom C Layer 1    | Y             | NT               | PACM     | 7                             | 3                          |

**Assessment Categories**

- |  |   |
|--|---|
| (1) Thermal Systems Insulation – Good Condition        | (5) Surfacing – Damaged                   |
| (2) Thermal Systems Insulation – Damaged               | (6) Surfacing – Significantly Damaged     |
| (3) Thermal Systems Insulation – Significantly Damaged | (7) Miscellaneous – Good Condition        |
| (4) Surfacing – Good Condition                         | (8) Miscellaneous – Damaged               |
|  | (9) Miscellaneous – Significantly Damaged |

**Asbestos Present**

- |                      |                          |
|----------------------|--------------------------|
| AMOS – Amosite       | ACTI – Actinolite        |
| CHRY – Chrysotile    | ND – None Detected       |
| CROC – Crocidolite   | NT – Not Tested          |
| ANTH – Anthophyllite | PACM – Presumed ACM      |
| TREM – Tremolite     | <b>Asbestos Detected</b> |



## CONCLUSIONS/RECOMMENDATIONS

### Asbestos Inspection

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 19, 2018 of the Commercial Building located at 5902 Howard Street in Hanahan, South Carolina did reveal the presence of ACM. Renovation or demolition activities that will disturb the ACM will require removal per state and federal regulations. Asbestos materials can become hazardous when, due to damage, disturbance, or deterioration over time, they release asbestos fibers into the air of the building. All areas that contain asbestos should be utilized in a controlled manner to reduce the potential for disturbance. OSHA requires notification to all trades/contractors about the condition of the ACM to prevent possible occupational exposures.

Demolition activities in public and commercial buildings are regulated by OSHA, EPA, and SCDHEC. Code 40 of Federal Regulations Part 61, Subpart M, Final Rule, "National Emissions Standards for Hazardous Air Pollutants" (NESHAP), and SCDHEC Regulation 61-86.1 require the proper removal and disposal of ACM that is affected by renovation or demolition. Demolition of the subject structures will require written notification, proper transportation, and disposal per state and federal regulations.

**PHOTOGRAPHS**  
**Commercial Building – 5902 Howard Street – Hanahan, SC**



**HOMOGENEOUS AREA 01  
TRANSITE SIDING**



**HOMOGENEOUS AREA 02  
SIDING FELT**



**HOMOGENEOUS AREA 03  
WINDOW GLAZING**



**HOMOGENEOUS AREA 04  
EXTERIOR CAULK**



**HOMOGENEOUS AREA 05  
ROOF SHINGLE**



**HOMOGENEOUS AREA 06  
ROOF FELT**



**PHOTOGRAPHS**  
**Commercial Building – 5902 Howard Street – Hanahan, SC**



**HOMOGENEOUS AREA 07  
BRICK MASTIC (BLACK)**



**HOMOGENEOUS AREA 08  
MDF BOARD**



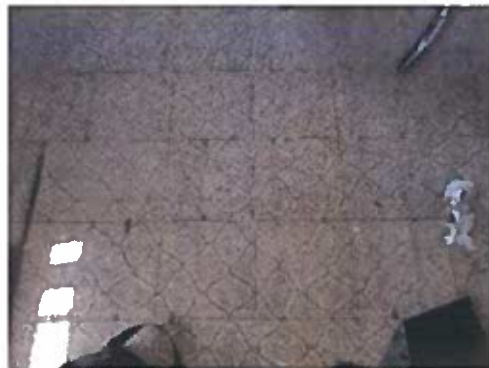
**HOMOGENEOUS AREA 09  
DRYWALL**



**HOMOGENEOUS AREA 10  
JOINT COMPOUND**

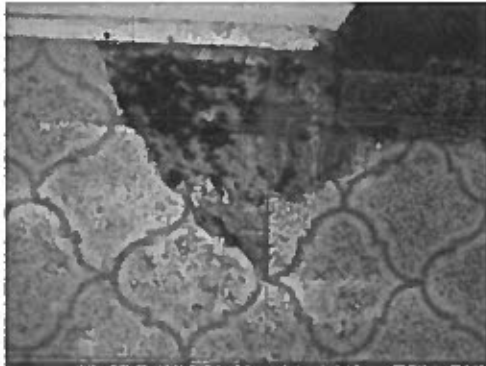


**HOMOGENEOUS AREA 11  
CEILING PANEL**



**HOMOGENEOUS AREAS 12, 13  
12" FLOOR TILE (BEIGE)  
MASTIC (TAN)**

**PHOTOGRAPHS**  
**Commercial Building – 5902 Howard Street – Hanahan, SC**



**HOMOGENEOUS AREA 14  
VINYL SHEET FLOORING (GREEN/RED)**



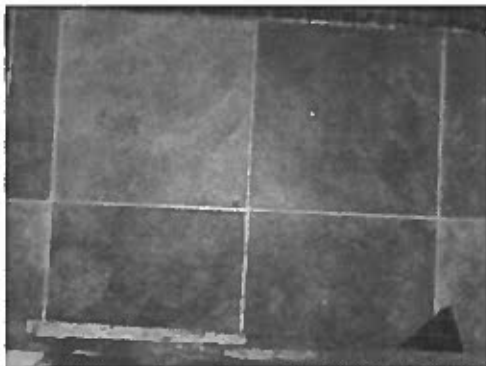
**HOMOGENEOUS AREA 15  
VINYL SHEET FLOORING  
(GRAY/RED/YELLOW)**



**HOMOGENEOUS AREA 16  
VINYL SHEET FLOORING (RED BRICK)**



**HOMOGENEOUS AREAS 17, 18  
VINYL SHEET FLOORING (BLUE BRICK)  
MASTIC (TAN)**



**HOMOGENEOUS AREA 19  
VINYL SHEET FLOORING  
(12" SLATE)**



**HOMOGENEOUS AREA 20  
VINYL SHEET FLOORING  
(9" BEIGE SQUARES)**

**PHOTOGRAPHS**

**Commercial Building – 5902 Howard Street – Hanahan, SC**



**HOMOGENEOUS AREA 21  
FLOOR FELT PAPER**



**HOMOGENEOUS AREA 22  
VINYL SHEET FLOORING  
(GREEN/BEIGE SQUARES)**



**HOMOGENEOUS AREA 23  
VINYL SHEET FLOORING (GREEN ROCKS)**



**HOMOGENEOUS AREA 24  
VINYL SHEET FLOORING (RED FLOWER)**



**HOMOGENEOUS AREA 25  
VINYL SHEET FLOORING (WOOD)**



**HOMOGENEOUS AREA 26  
12" SELF-STICK TILE (DARK SLATE)**

**PHOTOGRAPHS**

**Commercial Building – 5902 Howard Street – Hanahan, SC**



**HOMOGENEOUS AREA 27  
VINYL FLOOR PLANKS (DARK WOOD)**



**HOMOGENEOUS AREA 28  
VINYL SHEET FLOORING (RED/ORANGE)**

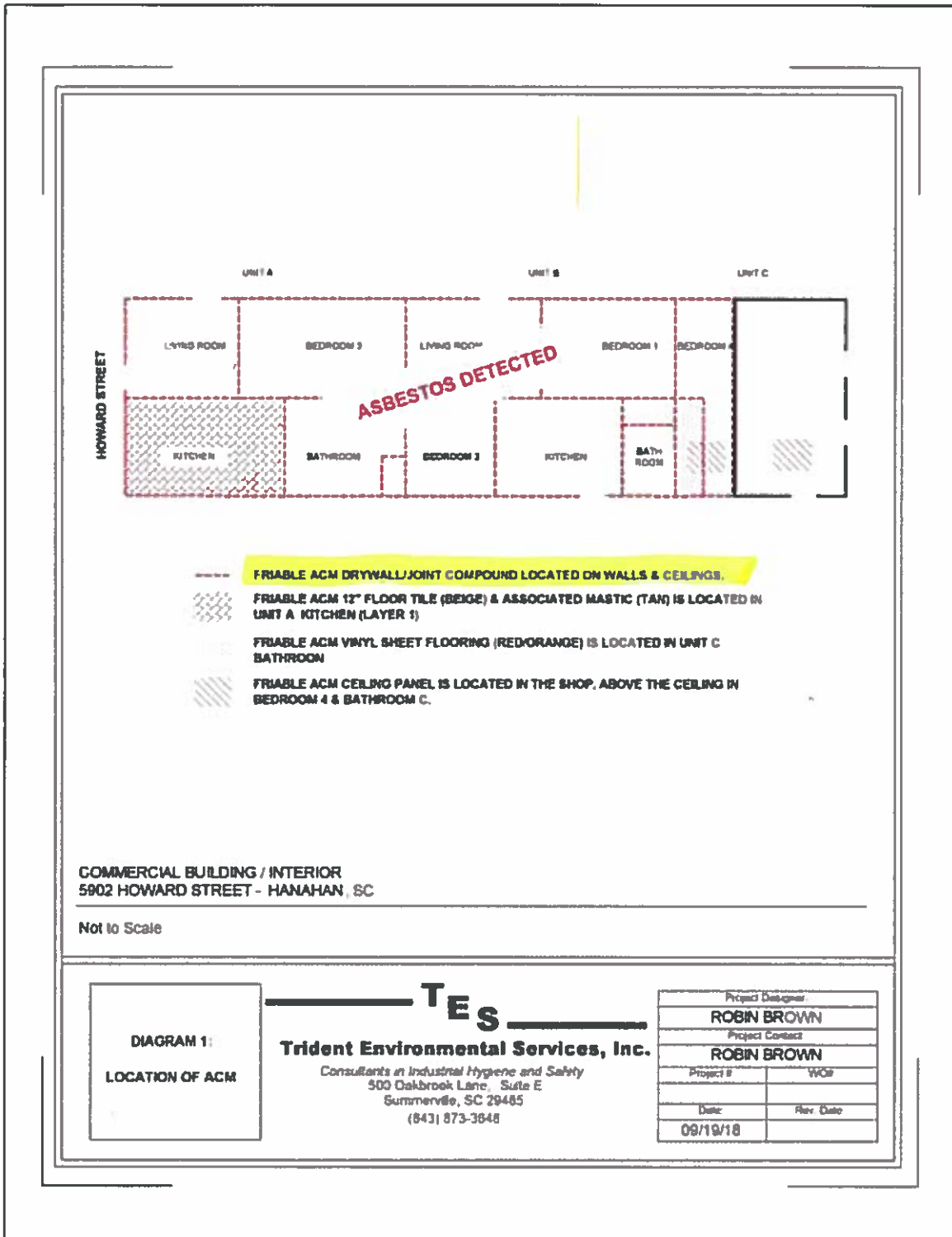


DIAGRAM 1:  
 LOCATION OF ACM

**TES**  
**Trident Environmental Services, Inc.**  
 Consultants in Industrial Hygiene and Safety  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485  
 (843) 873-3646

|                  |           |
|------------------|-----------|
| Project Designer |           |
| ROBIN BROWN      |           |
| Project Contact  |           |
| ROBIN BROWN      |           |
| Project #        | W08       |
| Date             | Rev. Date |
| 09/19/18         |           |



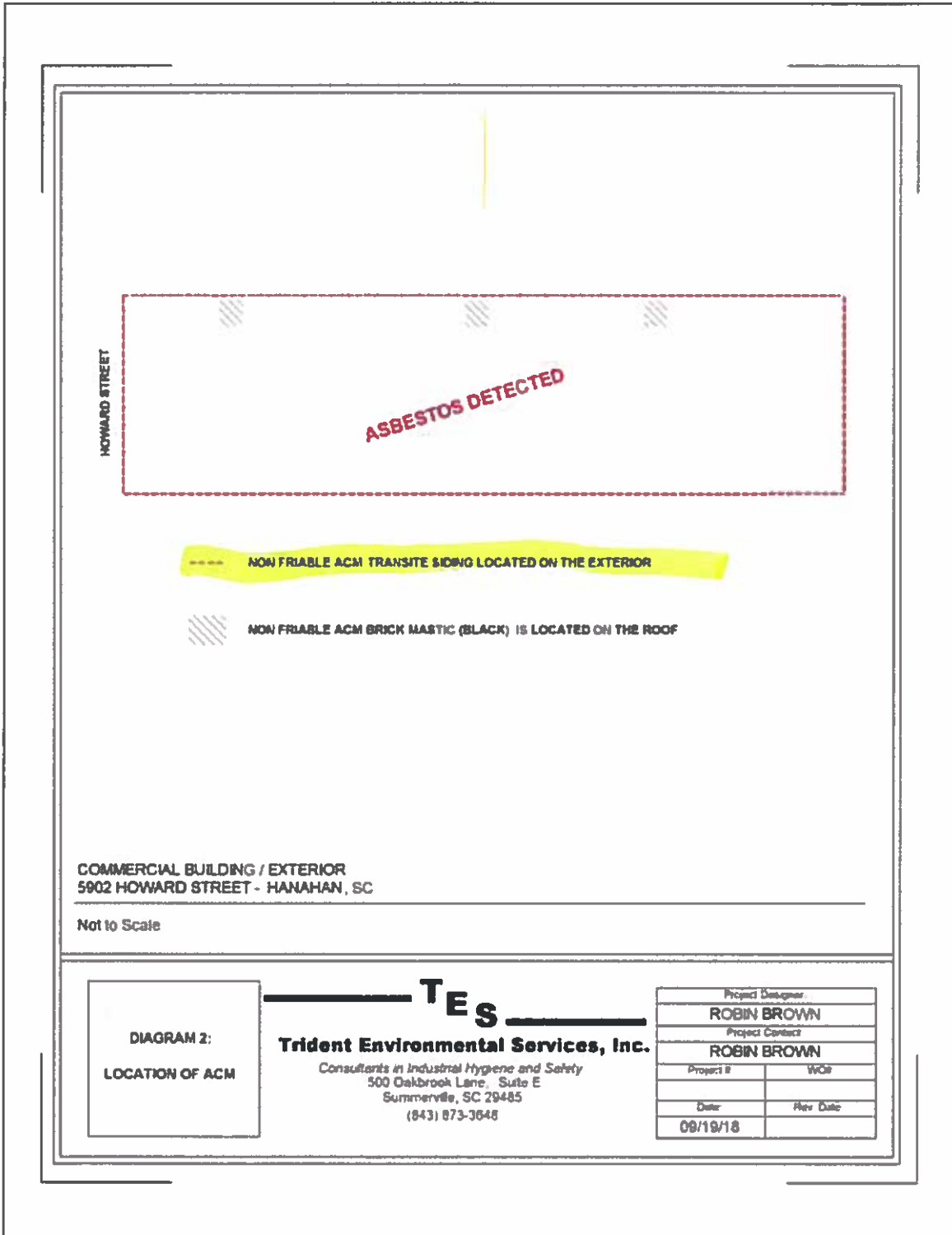


DIAGRAM 2:  
 LOCATION OF ACM

**TES**  
**Trident Environmental Services, Inc.**  
 Consultants in Industrial Hygiene and Safety  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485  
 (843) 873-3648

|                  |          |
|------------------|----------|
| Project Designer |          |
| ROBIN BROWN      |          |
| Project Contact  |          |
| ROBIN BROWN      |          |
| Project #        | WO#      |
| Date             | Rev Date |
| 09/19/18         |          |

**COMPREHENSIVE  
ASBESTOS SURVEY**

Inspection Date: 09/19/2018

Preparation Date: 10/03/2018

Inspected & Prepared By:

*Hunter Hanson*

Hunter Hanson  
S.C. Inspector License BI – 01468

**SCDHEC ISSUED**  
Asbestos ID Card

**Hunter Hanson**



|                   |                 |                 |
|-------------------|-----------------|-----------------|
| <b>CONSULTBI</b>  | <b>BI-01468</b> | <b>10/28/18</b> |
| <b>AIRSAMPLER</b> | <b>AS-00413</b> | <b>01/06/19</b> |

Expiration Date:

Reviewed By:

*Robin A. Brown*

Robin A. Brown  
S.C. Inspector License BI – 00613

**SCDHEC ISSUED**  
Asbestos ID Card

**Robin Brown**



|                   |                 |                 |
|-------------------|-----------------|-----------------|
| <b>CONSULTPD</b>  | <b>PD-00176</b> | <b>06/14/19</b> |
| <b>CONSULTBI</b>  | <b>BI-00613</b> | <b>06/26/19</b> |
| <b>AIRSAMPLER</b> | <b>AS-00178</b> | <b>02/05/19</b> |

Expiration Date:



United States Department of Commerce  
National Institute of Standards and Technology



**Certificate of Accreditation to ISO/IEC 17025:2005**

NVLAP LAB CODE: 200794-0

**Triangle Environmental Service Center, Inc.**  
Midlothian, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for

**Asbestos Fiber Analysis**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2018-04-01 through 2019-03-31

Effective Dates



*John S. Lamm*  
For the National Voluntary Laboratory Accreditation Program



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

Triangle Environmental Service Center, Inc.  
13509 East Boundary Road, Suite B  
Midlothian, VA 23112  
Mr. Feng Jiang  
Phone: 804-739-1751 Fax: 804-739-1753  
Email: info@tesclab.com  
http://www.tesclab.com

**ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 200794-0**

**Bulk Asbestos Analysis**

| <u>Code</u> | <u>Description</u>   |
|-------------|--|
| 18/A01      | EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples |
| 18/A03      | EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials  |

For the National Voluntary Laboratory Accreditation Program

United States Department of Commerce  
National Institute of Standards and Technology



## Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101904-0

**AmeriSci Richmond**  
Midlothian, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:

### Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).

2018-07-01 through 2019-06-30

Effective Dates



*John S. Damm*  
For the National Voluntary Laboratory Accreditation Program

**NVLAP** National Voluntary  
Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

AmeriSci Richmond  
dba AmeriSci Richmond  
13635 Genito Road  
Midlothian, VA 23112  
Mr. Thomas B. Keith  
Phone: 804-763-1200 Fax: 804-763-1800  
Email: [bkeith@amerisci.com](mailto:bkeith@amerisci.com)  
<http://www.amerisci.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101904-0

Bulk Asbestos Analysis

| <u>Code</u> | <u>Description</u>  |
|-------------|---|
| 18/A01      | EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples |
| 18/A03      | EPA 600/R-93/116; Method for the Determination of Asbestos in Bulk Building Materials   |

Airborne Asbestos Analysis

| <u>Code</u> | <u>Description</u>   |
|-------------|--|
| 18/A02      | U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A. |

\_\_\_\_\_  
For the National Voluntary Laboratory Accreditation Program

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middleton, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180920T

DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/20/2018  
 DATE OF REPORT: 09/20/2018

CLIENT JOB #: 5902 Howard Street

JOB SITE: Hanahan, SC

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 1             | 01-01 / Gray granular, white fibers  | 20% Chrysotile       |                       | 80%                     |
| 2             | 01-02 /                              | Positive Stop        |                       | 100%                    |
| 3             | 01-03 /                              | Positive Stop        |                       | 100%                    |
| 4             | 02-04 / Black tar-like               | NAD                  | 20% Cellulose         | 80%                     |
| 5             | 02-05 / Black tar-like               | NAD                  | 20% Cellulose         | 80%                     |
| 6             | 02-06 /                              | Not Analyzed         |                       | 100%                    |
| 7             | 03-07 / White powder                 | NAD                  |                       | 100%                    |
| 8             | 03-08 / White powder                 | NAD                  |                       | 100%                    |
| 9             | 03-09 /                              | Not Analyzed         |                       | 100%                    |
| 10            | 04-10 / White adhesive               | NAD                  |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/4-R3-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 210794-0

(LEGEND: NAD=No Asbestos Detected, I=ion, M=molecule, JC=Joint Compound)

Reviewed By Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Jianqiang Jiang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180920T

DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/20/2018  
 DATE OF REPORT: 09/20/2018

CLIENT JOB #: 5902 Howard Street  
 JOB SITE: Hanahan, SC

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 11            | 04-11 / White adhesive               | NAD                  |                       | 100%                    |
| 12            | 04-12 /                              | Not Analyzed         |                       | 100%                    |
| 13            | 05-13 / Black tar-like               | NAD                  | 10% Fiberglass        | 90%                     |
| 14            | 05-14 / Black tar-like               | NAD                  | 10% Fiberglass        | 90%                     |
| 15            | 05-15 /                              | Not Analyzed         |                       | 100%                    |
| 16            | 06-16 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 17            | 06-17 / Black fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 18            | 06-18 /                              | Not Analyzed         |                       | 100%                    |
| 19            | 07-19 / Black adhesive               | 10% Chrysotile       | 5% Cellulose          | 85%                     |
| 20            | 07-20 /                              | Positive Stop        |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M-93-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the TPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the items tested.

NVLAP Lab Code: 210794-0

[LEGEND: NAD=No Asbestos Detected, I=Inorganic, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director  
 Yuechang Jiang, Senior Geologist



**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180920T

DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/20/2018  
 DATE OF REPORT: 09/20/2018

CLIENT JOB #: 5902 Howard Street  
 JOB SITE: Hanahan, SC

ANALYST: B. Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 21            | 07-21 /                              | Positive Stop        |                       | 100%                    |
| 23            | 08-22 / Brown fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 23            | 08-23 / Brown fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 24            | 08-24 / Brown fibers                 | NAD                  | 98% Cellulose         | 2%                      |
| 25            | 09-25 / White powder, brown fibers   | NAD                  | 20% Cellulose         | 80%                     |
| 26            | 09-26 / White powder, brown fibers   | NAD                  | 20% Cellulose         | 80%                     |
| 27            | 09-27 / White powder, brown fibers   | NAD                  | 20% Cellulose         | 80%                     |
| 28            | 10-28 / White powder                 | 2% Chrysotile        |                       | 98%                     |
| 29            | 10-29 /                              | Positive Stop        |                       | 100%                    |
| 30            | 10-30 /                              | Positive Stop        |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M-93-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVIAP Lab Code: 210794-0

(LEGEND: NAD=No Asbestos Detected, I mo =I molecule, JC=Joint Compound)

Reviewed By: Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Juehong Jiang, Senior Geologist



**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middleton, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 18092018

DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/20/2018  
 DATE OF REPORT: 09/20/2018

CLIENT JOB #: 5902 Howard Street  
 JOB SITE: Hanahan, SC

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| 11            | 10-11 /                              | Positive Stop        |                       | 100%                    |
| 12            | 10-12 /                              | Positive Stop        |                       | 100%                    |
| 13            | 10-13 /                              | Positive Stop        |                       | 100%                    |
| 14            | 10-14 /                              | Positive Stop        |                       | 100%                    |
| 15            | 11-15 / Gray, white fibers           | 98% Chrysotile       |                       | 2%                      |
| 16            | 11-16 /                              | Positive Stop        |                       | 100%                    |
| 17            | 11-17 /                              | Positive Stop        |                       | 100%                    |
| 18            | 12-18 / Tan vinyl                    | 2% Chrysotile        |                       | 98%                     |
| 19            | 12-19 /                              | Positive Stop        |                       | 100%                    |
| 40            | 12-40 /                              | Positive Stop        |                       | 100%                    |
| 41            | 11-41 / Brown adhesive               | NAD                  |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-03-116, July 1993 (EPA-600/M4-R2-020, Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0

(LEGEND: NAD=No Asbestos Detected, I mo =1 molecule, JC=Joint Compound)

Reviewed By: Authorized Signatory:



Feng Jiang, VN, Senior Geologist, Laboratory Director  
 Lusheng Fang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 300 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180920T

DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/20/2018  
 DATE OF REPORT: 09/20/2018

CLIENT JOB/ #: 5902 Howard Street

JOB SITE: Hanahan, SC

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION    | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS           | NON FIBROUS % MATERIALS |
|---------------|---|----------------------|---------------------------------|-------------------------|
| 42            | 13-42 / Brown adhesive                  | NAD                  |                                 | 100%                    |
| 43            | 13-43 /                                 | Not Analyzed         |                                 | 100%                    |
| 44            | 14-44 / Black lino., fibers             | NAD                  | 20% Cellulose                   | 80%                     |
| 45            | 14-45 / Black lino., fibers             | NAD                  | 20% Cellulose                   | 80%                     |
| 46            | 14-46 /                                 | Not Analyzed         |                                 | 100%                    |
| 47            | 15-47 / Yellow, red lino., black fibers | NAD                  | 20% Cellulose                   | 80%                     |
| 48            | 15-48 / Yellow, red lino., black fibers | NAD                  | 20% Cellulose                   | 80%                     |
| 49            | 15-49 /                                 | Not Analyzed         |                                 | 100%                    |
| 50            | 16-50 / Brown lino., gray fibers        | NAD                  | 20% Cellulose<br>10% Fiberglass | 70%                     |
| 51            | 16-51 / Brown lino., gray fibers        | NAD                  | 20% Cellulose<br>10% Fiberglass | 70%                     |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EJ/V660/R-93-116, July 1993 (EPA-600/4-92-020, Dec 1992), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at or below the detected limit of method (reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. (this test report relates only to the item(s) tested)

NVLAP Lab Code: 2107944

[LEGEND: NAD=No Asbestos Detected, I mo =I molecul, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS Senior Geologist, Laboratory Director  
 Jiankang Feng, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middletown, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180920T

DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/20/2018  
 DATE OF REPORT: 09/20/2018

CLIENT JOB/ #: 5902 Howard Street

JOB SITE: Hanahan, SC

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS          | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|--------------------------------|-------------------------|
| 52            | 16-52 /                              | Not Analyzed         |                                | 100%                    |
| 53            | 17-53 / Blue lino., gray fibers      | NAD                  | 20% Cellulose<br>5% Fiberglass | 75%                     |
| 54            | 17-54 / Blue lino., gray fibers      | NAD                  | 20% Cellulose<br>5% Fiberglass | 75%                     |
| 55            | 17-55 /                              | Not Analyzed         |                                | 100%                    |
| 56            | 18-56 / Yellow adhesive              | NAD                  |                                | 100%                    |
| 57            | 18-57 / Yellow adhesive              | NAD                  |                                | 100%                    |
| 58            | 18-58 /                              | Not Analyzed         |                                | 100%                    |
| 59            | 19-59 / Brown linoleum               | NAD                  |                                | 100%                    |
| 60            | 19-60 / Brown linoleum               | NAD                  |                                | 100%                    |
| 61            | 19-61 /                              | Not Analyzed         |                                | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/R-93-116, Dec 1992), or the current US EPA method for the analysis of asbestos in building material. None detected: not detected at or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NV1AF Lab Code: 21079141

[LEGEND: NAD=No Asbestos Detected, Lino.=Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Junchang Jiang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 Ernst Boundary Road, Suite B, Middleham, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 180920T

DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/20/2018  
 DATE OF REPORT: 09/20/2018

CLIENT JOB/ #: 5902 Howard Street  
 JOB SITE: Hanahan, SC

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION    | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|---|----------------------|-----------------------|-------------------------|
| 62            | 20-62 / Gray lino , fibers              | NAD                  | 20% Cellulose         | 80%                     |
| 63            | 20-63 / Gray lino , fibers              | NAD                  | 20% Cellulose         | 80%                     |
| 64            | 20-64 /                                 | Not Analyzed         |                       | 100%                    |
| 65            | 21-65 / Black fibers                    | NAD                  | 98% Cellulose         | 2%                      |
| 66            | 21-66 / Black fibers                    | NAD                  | 98% Cellulose         | 2%                      |
| 67            | 21-67 /                                 | Not Analyzed         |                       | 100%                    |
| 68            | 22-68 / Green, blue lino , black fibers | NAD                  | 20% Cellulose         | 80%                     |
| 69            | 22-69 / Green, blue lino , black fibers | NAD                  | 20% Cellulose         | 80%                     |
| 70            | 22-70 /                                 | Not Analyzed         |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (TPA-600/RM-82-020 Dec 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at or below the detected limit of method (Reporting Limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. (this test report relates only to the items tested)

NVLAP Lab Code: 200794-0

[LEGEND: NAD=No Asbestos Detected, I mo =1 molecule, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Feng Jiang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

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 804-739-1751 • Fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180920T

DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/20/2018  
 DATE OF REPORT: 09/20/2018

CLIENT JOB #: 5902 Howard Street  
 JOB SITE: Hanahan, SC

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION  | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|---------------------------------------|----------------------|-----------------------|-------------------------|
| 71            | 21-71 / Green lino, black fibers      | NAD                  | 20% Cellulose         | 80%                     |
| 72            | 23-72 / Green lino, black fibers      | NAD                  | 20% Cellulose         | 80%                     |
| 73            | 23-73 /                               | Not Analyzed         |                       | 100%                    |
| 74            | 24-74 / Red, brown lino, black fibers | NAD                  | 20% Cellulose         | 80%                     |
| 75            | 24-75 / Red, brown lino, black fibers | NAD                  |                       | 100%                    |
| 76            | 24-76 /                               | Not Analyzed         |                       | 100%                    |
| 77            | 25-77 / Brown linoleum                | NAD                  | 5% Fiberglass         | 95%                     |
| 78            | 25-78 / Brown linoleum                | NAD                  | 5% Fiberglass         | 95%                     |
| 79            | 25-79 /                               | Not Analyzed         |                       | 100%                    |
| 80            | 26-80 / Brown vinyl                   | NAD                  |                       | 100%                    |

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M-93-029, Dec. 1992), or the current US EPA method for the analysis of asbestos in building material. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVLAP Lab Code: 210794-0

[LEGEND NAD=No Asbestos Detected, Lino=Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Yunchang Jiang, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Midlothian, VA 23112  
 804-739-1751 • fax: 804-739-1753

**BULK ASBESTOS SAMPLE ANALYSIS SUMMARY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN # 180920T

DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/20/2018  
 DATE OF REPORT: 09/20/2018

CLIENT JOB/ #: 5902 Howard Street

JOB SITE: Hanahan, SC

ANALYST: B Trimmer

| TESC SAMPLE # | CLIENT SAMPLE ID & GROSS DESCRIPTION | ESTIMATED % ASBESTOS | NON ASBESTOS % FIBERS | NON FIBROUS % MATERIALS |
|---------------|--------------------------------------|----------------------|-----------------------|-------------------------|
| R1            | 26-R1 / Brown vinyl                  | NAD                  |                       | 100%                    |
| R2            | 26-R2 /                              | Not Analyzed         |                       | 100%                    |
| R3            | 27-R3 / Brown vinyl                  | NAD                  |                       | 100%                    |
| R4            | 27-R4 / Brown vinyl                  | NAD                  |                       | 100%                    |
| R5            | 27-R5 /                              | Not Analyzed         |                       | 100%                    |
| R6            | 28-R6 / Red lined gray fibers        | 20% Chrysotile       | 20% Cellulose         | 60%                     |
| R7            | 28-R7 /                              | Positive Stop        |                       | 100%                    |
| R8            | 28-R8 /                              | Positive Stop        |                       | 100%                    |

**Total Samples/Layers Analyzed: 52**

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/M-82-029, Dec. 1982), or the current US EPA method for the analysis of asbestos in building material. None Detected - not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVI AP Lab Code: 210794-0

(LEGEND: NAD=No Asbestos Detected, I=Inorganic, JC=Joint Compound)

Reviewed By Authorized Signatory:



Feng Jiang, MS, Senior Geologist, Laboratory Director  
 Yuechung Fung, Senior Geologist

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

12509 East Boundary Road, Suite B, Middleburg, VA 22112 • 804-729-1751 • FAX: 804-729-1752

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TIESC LOGIN # PR19201X  
 DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/23/2018  
 DATE OF REPORT: 09/25/2018  
 ANALYST: B. Gjola

CLIENT PROJECT # 5902 Howard Street  
 JOBSITE: Hanahan, SC  
 TAT: 1 Day

| TIESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|----------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
| 1              | 02-08           | 0.348             | 50.6                     | 11.2                     | 38.2                               | NAD              |
| 2              | 03-08           | 0.272             | 9.2                      | 87.1                     | 3.7                                | NAD              |
| 3              | 04-12           | 0.339             | 20.9                     | 75.8                     | 3.3                                | <1% Chrysotile   |
| 4              | 05-15           | 0.42              | 19.8                     | 44.8                     | 35.4                               | NAD              |
| 5              | 06-18           | 0.259             | 96.9                     | 2.7                      | .4                                 | NAD              |

Sample present in one of old glaze

Reviewed By Authorized Signatory:

*Gaudyong Fang*

Feng Jiang, IAT Science Consultant, Laboratory Director  
 Gaudyong Fang, Senior Analyst

This report must be reproduced in full with the approval of TIESC, Inc. The test report relates only to the asbestos listed. This test was performed by an NVLAP accredited ILM Lab. NVLAP Lab ID: 101943-01-ITEM analysis by E-17A 600 R-91 116 (not correct by NVLAP) Bulk - accreditation (LEGEND) NAD - No Asbestos Detected NA - Not Analyzed, PS - Positive Slap, Trace - 1%, NVA - No Visual Asbestos



**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middleham, VA 23112 • 804-739-1751 • fax: 804-739-1750

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

CLIENT PROJECT #: 5902 Howard Street  
 JOB SITE: Hanahan, SC

TAT: B. Gjoka

TESC LOGIN #: IM1920X  
 DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/23/2018  
 DATE OF REPORT: 09/25/2018

ANALYST: B. Gjoka

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|

|   |       |       |    |      |      |                  |
|---|-------|-------|----|------|------|------------------|
| 6 | 13-43 | 0.147 | 49 | 29.3 | 21.7 | <1.9% Chrysotile |
|---|-------|-------|----|------|------|------------------|

Probable contamination from positive floor tile

|   |       |       |      |      |     |     |
|---|-------|-------|------|------|-----|-----|
| 7 | 14-46 | 0.199 | 76.9 | 20.7 | 2.4 | NAD |
|---|-------|-------|------|------|-----|-----|

|   |       |       |      |      |    |                |
|---|-------|-------|------|------|----|----------------|
| 8 | 15-49 | 0.181 | 75.2 | 24.2 | .6 | <1% Chrysotile |
|---|-------|-------|------|------|----|----------------|

Probable contamination from black mastic

|   |       |       |      |      |      |     |
|---|-------|-------|------|------|------|-----|
| 9 | 16-52 | 0.219 | 61.2 | 14.6 | 24.2 | NAD |
|---|-------|-------|------|------|------|-----|

|    |       |       |      |      |      |     |
|----|-------|-------|------|------|------|-----|
| 10 | 17-55 | 0.125 | 51.2 | 26.4 | 22.4 | NAD |
|----|-------|-------|------|------|------|-----|

Reviewed By Authorized Signatory:

*Ajudery Fang*

Feng Jiang, LGS Senior Analyst, Laboratory Director  
 Iwabang Corp, Senior Geologist

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**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

12509 East Boundary Road, Suite B, Middleham, VA 23112 • 804-729-1751 • FAX: 804-729-1750

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485

TESC LOGIN #: 181926X

DATE OF RECEIPT: 09/20/2018

DATE OF ANALYSIS: 09/23/2018

DATE OF REPORT: 09/25/2018

ANALYST: B. Gjola

CLIENT PROJECT #: 5902 Howard Street

JOB SITE: Hanahan, SC

TAT:

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
| 11            | 18-58           | 0.145             | 59.3                     | 6.2                      | 34.5                               | NAD              |
| 12            | 19-61           | 0.242             | 78.5                     | 20.2                     | 1.3                                | NAD              |
| 13            | 20-64           | 0.291             | 56                       | 43.3                     | 7                                  | NAD              |
| 14            | 21-67           | 0.175             | 86.9                     | 6.3                      | 6.8                                | NAD              |
| 15            | 22-70           | 0.196             | 58.7                     | 37.8                     | 3.5                                | NAD              |

*Gwendolyn Fung*

Reviewed By Authorized Signatory:

*Feng Jiang, LVS Senior Geologist, Laboratory Plans are  
 I made up Fung, Senior Geologist*

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**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

13509 East Boundary Road, Suite B, Middleham, VA 23112 • 804-739-1751 • Fax: 804-739-1753

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc. TFCF LOGIN #: 181920X  
 500 Oakbrook Lane, Suite E  
 Summerville, SC 29485  
 DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/24/2018  
 DATE OF REPORT: 09/25/2018  
 ANALYST: B. Gjoka

CLIENT PROJECT #: 5902 Howard Street

JOBSITE: Hanahan, SC

TAT:

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
| 16            | 23-73           | 0.195             | 76.4                     | 23.1                     | .5                                 | NAD              |
| 17            | 24-78           | 0.171             | 80.1                     | 11.1                     | 8.8                                | NAD              |
| 18            | 25-79           | 0.20              | 59                       | 39.7                     | 1.3                                | NAD              |
| 19            | 26-82           | 0.328             | 9.5                      | 88                       | 2.5                                | NAD              |
| 20            | 27-85           | 0.288             | 27.1                     | 72.2                     | .7                                 | NAD              |

Reviewed By Authorized Signatory:

*Azudory Tang*

Feng Jiang, J.S. Service (Analyst), Laboratory, Fibers are  
 Following P-imp, Service (Analyst)

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 (LEGEND) NAD - No Asbestos Detected; NA - Not Analyzed; PS - Positive Stop; Trace - 1%, NVA - No Visual Asbestos

**TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.**

12509 East Boundary Road, Suite B, Middleham, VA 23113 • 804-739-1781 • Fax: 804-739-1783

**SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: Trident Environmental Services, Inc.  
 501 Oakbrook Lane, Suite E  
 Summerville, SC 29485

CLIENT PROJECT #: 5902 Howard Street  
 JOBSITE: Hanahan, SC

TAT: B. Gjola

TESC LOGIN #: IM1930X

DATE OF RECEIPT: 09/20/2018  
 DATE OF ANALYSIS: 09/21/2018  
 DATE OF REPORT: 09/25/2018

| TESC SAMPLE # | CLIENT SAMPLE # | SAMPLE WEIGHT (g) | HEAT SENSITIVE ORGANIC % | ACID SOLUBLE INORGANIC % | INSOLUBLE NON-ASBESTOS INORGANIC % | ASBESTOS% BY TEM |
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|
|---------------|-----------------|-------------------|--------------------------|--------------------------|------------------------------------|------------------|

Total Sample(s) Analyzed: 20

*Audrey Tang*

Reviewed By Authorized Signatory:

Feng Hong, A.S. Senior Industrial Hygienist, Laboratory Director  
 12509 East Boundary Road, Suite B, Middleham, VA 23113

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 (LEGEND: NAD - No Asbestos Detected; NA - Not Analyzed; PS - Positive Step; TMS - TMS; NVA - No Visual Asbestos)

September 25, 2018

Page 3 of 5

TESC LOGIN NUMBER: 180920T

TRIANGLE ENVIRONMENTAL SERVICE CENTER  
 13609 East Boundary Road, Suite B • Midlothian • VA • 23112 • Tel: 804-739-1761 • Fax: 804-739-1763

CHAIN OF CUSTODY FORM

LAB CUSTOMER: Trident Environmental Services, Inc.  
 ADDRESS: 500 Oakbrook Lane - Suite E  
 CITY, STATE, ZIP: Summerville, SC 29485

TAT: 2 Hour: \_\_\_\_\_ 8 Hour: RM 24 Hour: \_\_\_\_\_ 48 Hour: \_\_\_\_\_ 3 Day: TCM 6 Day: \_\_\_\_\_

CONTACT METHOD: Phone: 843-873-3648 Fax: 888-266-2040 Email: On TESC File

DATE: 9-19-18

CONTACT NAME: Robin Brown

PROJECT #: 5902 Howard Street

PROJECT SITE: Hanahan SC

| Sample number | Sample Date | Asbestos          |                 |                     |                      |                 |                     |               |                    |     |                 | Lead       |      |           |       |                     |             |        |              |                     |           | Other Metals |              |              |      |                |                              |                               |  |  |  | Air Quality/Mold |          |  |  | Comments |
|---------------|-------------|-------------------|-----------------|---------------------|----------------------|-----------------|---------------------|---------------|--------------------|-----|-----------------|------------|------|-----------|-------|---------------------|-------------|--------|--------------|---------------------|-----------|--------------|--------------|--------------|------|----------------|------------------------------|-------------------------------|--|--|--|------------------|----------|--|--|----------|
|               |             | Bulk ID by PLM    | PCM Fiber Count | PLM Point Count 400 | PLM Point Count 1000 | PLM Gravimetric | CARB 435 (Sol only) | TEM AHERA Air | TEM Bulk Certified | Air | Paint (% & PPM) | Soil (ppm) | Wipe | TCLP (Pb) | Water | Drinking Water (Pb) | TCLP RCRA 8 | CAM 17 | Welding Fume | Toxic Metal Profile | Bioassess | Side         | Surface Type | Surface Swab | Bulk | Air Volume (L) | Wipe Area (ft <sup>2</sup> ) | Sweep Area (cm <sup>2</sup> ) |  |  |  |                  |          |  |  |          |
| Released by   | Hunter      | Signature: Hunter |                 |                     |                      |                 |                     |               |                    |     |                 |            |      |           |       |                     |             |        |              |                     |           |              |              |              |      |                |                              |                               |  |  |  | Date/Time        | 9-19-18  |  |  |          |
| Received by   | Huaso       | Signature: Huaso  |                 |                     |                      |                 |                     |               |                    |     |                 |            |      |           |       |                     |             |        |              |                     |           |              |              |              |      |                |                              |                               |  |  |  | Date/Time        | 9-20-18  |  |  |          |
| Released by   |             | Signature:        |                 |                     |                      |                 |                     |               |                    |     |                 |            |      |           |       |                     |             |        |              |                     |           |              |              |              |      |                |                              |                               |  |  |  | Date/Time        | 10-08-18 |  |  |          |
| Received by   |             | Signature:        |                 |                     |                      |                 |                     |               |                    |     |                 |            |      |           |       |                     |             |        |              |                     |           |              |              |              |      |                |                              |                               |  |  |  | Date/Time        |          |  |  |          |

Prepared by TESC

Pages \_\_\_\_ of \_\_\_\_

make sure this site is requested with lines to note

**TES**  
 Trident Environmental Services, Inc.  
 Consultants in Industrial Hygiene and Safety  
 500 Calhoun Lane, Suite E  
 Summerville, SC 29485  
 Phone: (843) 873-3648  
 Fax: (843) 873-1767

180920X 21 TEM Bulk

**CHAIN OF CUSTODY FORM**  
 Asbestos Bulk Samples

Project Name 5902 Howard Street Date 9-19-18  
 Location Hanahan, SC

| DESCRIPTION OF EACH SAMPLE AREA |           |                 |                       |             | ASSESSMENT OF MATERIALS |               |               |              |
|---------------------------------|-----------|-----------------|-----------------------|-------------|-------------------------|---------------|---------------|--------------|
| Sample Area                     | Sample ID | Location        | Description           | Friable (+) | Friable (-)             | Asbestos Type | COND Asbestos | HAZ Asbestos |
|                                 | 01        | Exterior Siding | Tranlite Panel        |             | X                       |               | 7             |              |
|                                 | 02        |                 |                       |             |                         |               |               |              |
|                                 | 03        |                 |                       |             |                         |               |               |              |
|                                 | 04        |                 | Siding Felt           |             | X                       |               | 7             |              |
|                                 | 05        |                 |                       |             |                         |               |               |              |
|                                 | 06        |                 |                       |             |                         |               |               |              |
|                                 | 07        | Window 1        | Window Glazing        | X           |                         |               | 7             |              |
|                                 | 08        | Window 2        |                       |             |                         |               |               |              |
|                                 | 09        | Window 3        |                       |             |                         |               |               |              |
|                                 | 10        | Window 1        | Exterior Caulk        |             | X                       |               | 7             |              |
|                                 | 11        | Door 1          |                       |             |                         |               |               |              |
|                                 | 12        | Door 2          |                       |             |                         |               |               |              |
|                                 | 13        | Exterior Roof   | Roof Shingle          |             | X                       |               | 7             |              |
|                                 | 14        |                 |                       |             |                         |               |               |              |
|                                 | 15        |                 |                       |             |                         |               |               |              |
|                                 | 16        |                 | Roof felt paper       |             | X                       |               | 7             |              |
|                                 | 17        |                 |                       |             |                         |               |               |              |
|                                 | 18        |                 |                       |             |                         |               |               |              |
|                                 | 19        |                 | Bulk material (Black) |             | X                       |               | 7             |              |
|                                 | 20        |                 |                       |             |                         |               |               |              |
|                                 | 21        |                 |                       |             |                         |               |               |              |

|   |   |  |
|---|---|--|
| <b>Condition Assessment Categories</b><br>(1) Thermal Systems Insulation - Good Condition<br>(2) Thermal Systems Insulation - Damaged<br>(3) Thermal Systems Insulation - Significantly Damaged<br>(4) Surfacing - Good Condition<br>(5) Surfacing - Damaged<br>(6) Surfacing - Significantly Damaged | <b>Asbestos Project</b><br>(1) Amosite<br>(2) Chrysotile<br>(3) Crocidolite<br>(4) Anthophyllite<br>(5) Tremolite<br>(6) Actinolite | <b>HAZARD Assessment Categories</b><br>O = Good Condition<br>D = Damaged<br>S = Significantly Damaged<br>LPD = Low Potential for Disturbance |
|---|---|--|

Samples Collected by Alvin Hanahan Date / Time 9-19-18  
 Samples Received by E. [Signature] Date / Time 9-20-18 10:00am  
[Signature] [Signature] 9/20/18 2:05pm

**TES**

Trident Environmental Services, Inc.  
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 Fax (843) 871-7767

180420X

**CHAIN OF CUSTODY FORM**  
 Asbestos Bulk Samples

Project Name: 5902 Howard Street Date: 9-17-18  
 Location: Hanahan SC

| DESCRIPTION OF EACH SAMPLE AREA |           |               |                         |             |             | ASSESSMENT OF MATERIALS |             |            |
|---------------------------------|-----------|---------------|-------------------------|-------------|-------------|-------------------------|-------------|------------|
| Room Area                       | Sample ID | Location      | Description             | Friable (+) | Friable (-) | Asbestos Type           | COND Assess | HAZ Assess |
| 08                              | 22        | Living Room A | MDF Board               | X           |             |                         | 7           |            |
|                                 | 23        |               |                         |             |             |                         |             |            |
|                                 | 24        |               |                         |             |             |                         |             |            |
| 09                              | 25        | Bedroom A     | Drywall                 | X           |             |                         | 7           |            |
|                                 | 26        |               |                         |             |             |                         |             |            |
|                                 | 27        |               |                         |             |             |                         |             |            |
| 10                              | 28        | Living Room A | Joint Compound          | X           |             |                         | 4           |            |
|                                 | 29        | Kitchen A     |                         |             |             |                         |             |            |
|                                 | 30        | Bedroom A     |                         |             |             |                         |             |            |
|                                 | 31        | Bedroom 2 B   |                         |             |             |                         |             |            |
|                                 | 32        | Living Room B |                         |             |             |                         |             |            |
|                                 | 33        | Kitchen B     |                         |             |             |                         |             |            |
|                                 | 34        | Bedroom 1 B   |                         |             |             |                         |             |            |
| 11                              | 35        | Shed          | Ceiling Panel           | X           |             |                         | 9           |            |
|                                 | 36        |               |                         |             |             |                         |             |            |
|                                 | 37        |               |                         |             |             |                         |             |            |
| 12                              | 38        | Kitchen A-L   | 12" Fiberglass (Boards) | X           |             |                         | 7           |            |
|                                 | 39        |               |                         |             |             |                         |             |            |
| ✓                               | 40        |               |                         |             |             |                         |             |            |

**COND Assessment Categories**

(1) Thermal Systems Insulation - Good Condition  
 (2) Thermal Systems Insulation - Damaged  
 (3) Thermal Systems Insulation - Significantly Damaged  
 (4) Surfacing - Good Condition  
 (5) Surfacing - Damaged  
 (6) Surfacing - Significantly Damaged

**Asbestos Present**

(1) Actinolite  
 (2) Chrysotile  
 (3) Crocidolite  
 (4) Amphibole  
 (5) Tremolite  
 (6) Actinolite

**HAZARD Assessment Categories**

O = Good Condition  
 D = Damaged  
 S = Significantly Damaged  
 LPD = Low Potential for Disturbance

Samples Collected by: Hunter Hanson Date / Time: 9-19-18  
 Samples Received by: [Signature] Date / Time: 9-20-18 10:00am  
[Signature] 9/20/18 7:00pm



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1809201X

**CHAIN OF CUSTODY FORM**  
 Asbestos Bulk Samples

Project Name: 5902 Howard Street Date: 9-19-18  
 Location: Hanahan SC

| Monitoring Area | Sample ID | Location                 | Description                               | Priority |     | ASSESSMENT OF MATERIALS |            |           |
|-----------------|-----------|--------------------------|---|----------|-----|-------------------------|------------|-----------|
|                 |           |                          |   | (+)      | (-) | Asbestos Type           | COND Asses | HAZ Asses |
| ✓ 13            | 42        | Kitchen # 1              | Vinyl Floor<br>Floor tile mastic<br>(tan) |          | ✓   |                         | 7          |           |
| ✓ 14            | 44        | Kitchen A L2             | Vinyl Sheet Flooring<br>(Green/Red)       |          | ✓   |                         | 7          |           |
| ✓ 15            | 45        | Kitchen Living Room # L2 | Vinyl Sheet Flooring<br>(Green/Red)       |          | ✓   |                         | 7          |           |
| ✓ 15            | 46        | Room B L2                | Vinyl Sheet Flooring<br>(Green/Red)       |          | ✓   |                         | 7          |           |
| ✓ 15            | 47        | Kitchen A L3             | Vinyl Sheet Flooring<br>(Grey/Red/Yellow) |          | ✓   |                         | 7          |           |
| ✓ 15            | 48        |                          | Vinyl Sheet Flooring<br>(Red/Black)       |          | ✓   |                         | 7          |           |
| ✓ 16            | 50        | Kitchen A L1             | Vinyl Sheet Flooring<br>(Red/Black)       |          | ✓   |                         | 7          |           |
| ✓ 17            | 51        |                          |   |          |     |                         |            |           |
| ✓ 17            | 52        |                          |   |          |     |                         |            |           |
| ✓ 17            | 53        | Living Room A L1         | Vinyl Sheet Flooring<br>(Blue/Black)      |          | ✓   |                         | 7          |           |
| ✓ 18            | 54        |                          |   |          |     |                         |            |           |
| ✓ 18            | 55        | Living Room A L1         | Vinyl mastic<br>(tan)                     |          | ✓   |                         | 7          |           |
| ✓ 18            | 56        |                          |   |          |     |                         |            |           |
| ✓ 17            | 57        | Living Room A L1         | Vinyl Sheet Flooring<br>(1" Slate)        |          | ✓   |                         | 7          |           |
| ✓ 17            | 58        |                          |   |          |     |                         |            |           |
| ✓ 17            | 59        | Living Room A L1         | Vinyl Sheet Flooring<br>(1" Slate)        |          | ✓   |                         | 7          |           |
| ✓ 17            | 60        |                          |   |          |     |                         |            |           |
| ✓ 17            | 61        | Kitchen B L1             | Vinyl Sheet Flooring<br>(tan)             |          | ✓   |                         | 7          |           |

**CONDITION Assessment Categories**  
 (1) Thermal Systems Insulation - Good Condition  
 (2) Thermal Systems Insulation - Damaged  
 (3) Thermal Systems Insulation - Significantly Damaged  
 (4) Surfacing - Good Condition  
 (5) Surfacing - Damaged  
 (6) Surfacing - Significantly Damaged

**Asbestos Content**  
 (1) Amosite  
 (2) Chrysotile  
 (3) Crocidolite  
 (4) Anthophyllite  
 (5) Tremolite  
 (6) Actinolite

**HAZARD Assessment Categories**  
 G = Good Condition  
 D = Damaged  
 S = Significantly Damaged  
 LPO = Low Potential for Disturbance

Samples Collected by: Hunter Hanna  
 Samples Received by: [Signature]

Date / Time: 9-19-18  
 Date / Time: 9-20-18 10:30 AM  
9/20/18 2:02 PM

**TES**  
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 Fax (843) 873-1797

180920X

**CHAIN OF CUSTODY FORM**  
 Asbestos Bulk Samples

Project Name: 5902 Howard Street

Location: Hanahan SC

Date: 9-19-18

| Sampling Area | Sample ID | DESCRIPTION OF EACH SAMPLE AREA |  |             |             | ASSESSMENT OF MATERIALS |             |            |
|---------------|-----------|---------------------------------|--|-------------|-------------|-------------------------|-------------|------------|
|               |           | Location                        | Description                              | Friable (+) | Friable (-) | Asbestos Type           | COND Assess | HAZ Assess |
| ✓ 20          | L2        | Bedroom A L1                    | Vinyl Sheet Flooring (9" Beige Sq)       | X           |             |                         | 7           |            |
|               | L3        |                                 |  |             |             |                         |             |            |
|               | L4        |                                 |  |             |             |                         |             |            |
| ✓ 21          | 65        | L2                              | Floor Felt Paper                         |             | X           |                         | 7           |            |
|               | 66        |                                 |  |             |             |                         |             |            |
| ✓ 22          | 67        |                                 |  |             |             |                         |             |            |
|               | 68        | L3                              | Vinyl Sheet Flooring (Green/Orange wall) |             |             |                         | 7           |            |
|               | 69        |                                 | nominal                                  |             |             |                         |             |            |
| ✓ 23          | 70        |                                 |  |             |             |                         |             |            |
|               | 71        | L4                              | Vinyl Sheet Flooring (Green/Red wall)    | X           |             |                         | 7           |            |
|               | 72        |                                 | nominal                                  |             |             |                         |             |            |
| ✓ 24          | 73        | Bedroom 3 L3                    | Vinyl Sheet Flooring (Red Floor)         | X           |             |                         | 7           |            |
|               | 74        |                                 | nominal                                  |             |             |                         |             |            |
| ✓ 25          | 75        |                                 |  |             |             |                         |             |            |
|               | 76        |                                 |  |             |             |                         |             |            |
| ✓ 26          | 77        | Living Room B L1                | Vinyl Sheet Flooring (Wood)              |             |             |                         | 7           |            |
|               | 78        |                                 | nominal                                  |             |             |                         |             |            |
| ✓ 27          | 79        |                                 |  |             |             |                         |             |            |
|               | 80        | Kitchen B L1                    | 11" Self Stick Floor tile (Marble)       | X           |             |                         | 7           |            |
|               | 81        |                                 |  |             |             |                         |             |            |
| ✓ 28          | 82        |                                 |  |             |             |                         |             |            |

|  |   |  |
|--|---|--|
| <b>CONDITION Assessment Categories</b><br>(1) Thermal System Insulation - Good Condition<br>(2) Thermal System Insulation - Damaged<br>(3) Thermal System Insulation - Significantly Damaged<br>(4) Surfacing - Good Condition<br>(5) Surfacing - Damaged<br>(6) Surfacing - Significantly Damaged | <b>Asbestos Present</b><br>(1) Amosite<br>(2) Chrysotile<br>(3) Crocidolite<br>(4) Anthophyllite<br>(5) Tremolite<br>(6) Actinolite | <b>HAZARD Assessment Categories</b><br>0 = Good Condition<br>D = Damaged<br>S = Significantly Damaged<br>LPD = Low Potential for Disturbance |
|--|---|--|

Samples Collected by: Hunter Hans

Samples Received by: [Signature]

Date / Time: 9-19-18  
 Date / Time: 9-20-18 10:00am  
9/20/18 7:00pm

**TES**  
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180920TX

**CHAIN OF CUSTODY FORM**  
 Asbestos Bulk Samples

Project Name: 5902 Howard Street Date: 9-19-18  
 Location: Hanahan SC

| DESCRIPTION OF EACH SAMPLE AREA |           |               |                      |             |             |               | ASSESSMENT OF MATERIALS |            |  |
|---------------------------------|-----------|---------------|----------------------|-------------|-------------|---------------|-------------------------|------------|--|
| Room/ Area                      | Sample ID | Location      | Description          | Friable (+) | Friable (-) | Asbestos Type | COND Assess             | HAZ Assess |  |
| 27                              | R3        | Bathroom B L1 | Vinyl Floor Plank    | X           |             |               | 7                       |            |  |
|                                 | R4        | ↓             | (DK Waste)           |             |             |               |                         |            |  |
|                                 | R5        | ↓             |                      |             |             |               |                         |            |  |
| 28                              | R6        | Bathroom C L1 | Vinyl Sheet Flooring | X           |             |               | 7                       |            |  |
|                                 | R7        | ↓             | (Red/Orange)         |             |             |               |                         |            |  |
|                                 | R8        | ↓             | on material          |             |             |               |                         |            |  |
|                                 |           |               |                      |             |             |               |                         |            |  |
|                                 |           |               |                      |             |             |               |                         |            |  |
|                                 |           |               |                      |             |             |               |                         |            |  |
|                                 |           |               |                      |             |             |               |                         |            |  |
|                                 |           |               |                      |             |             |               |                         |            |  |
|                                 |           |               |                      |             |             |               |                         |            |  |
|                                 |           |               |                      |             |             |               |                         |            |  |
|                                 |           |               |                      |             |             |               |                         |            |  |
|                                 |           |               |                      |             |             |               |                         |            |  |

**CONDITION Assessment Categories**

- (1) Thermal Systems Insulation - Good Condition
- (2) Thermal Systems Insulation - Damaged
- (3) Thermal Systems Insulation - Significantly Damaged
- (4) Surfacing - Good Condition
- (5) Surfacing - Damaged
- (6) Surfacing - Significantly Damaged

**Asbestos Present**

- (1) Amosite
- (2) Crocidolite
- (3) Chrysotile
- (4) Anthrophyllite
- (5) Tremolite
- (6) Actinolite

**HAZARD Assessment Categories**

- G = Good Condition
- D = Damaged
- S = Significantly Damaged
- LPO = Low Potential for Disturbance

Samples Collected by: Frankie Homan Date / Time: 9-19-18  
 Samples Received by: [Signature] Date / Time: 9-20-18 10:00AM  
WLOBS 2:25pm